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WESTERN DISTRICT OF WISCONSIN
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RICHARD W. WIEKING
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NORTHERN DISTRICT OF CALIFORNIA

JCS

CV 08

0930

February 6, 2008

Richard W. Wieking, Clerk of Court
United States District Court
Northern District of California
450 Golden Gate Avenue, 16th Floor
San Francisco, CA 94102

RE: KRAFT FOOD HOLDINGS, INC. v. THE PROCTER & GAMBLE COMPANY
W.D. of WI Case No. 07-CV-00613

Dear Clerk:

Enclosed please find the original record in the matter referenced above, along with a certified copy of the docket sheet and the order transferring this case to your court. This package contains documents 1-16 only. Documents 17-33 were filed electronically. Please use the guest login and password provided below to access the remaining documents on CM/ECF.

Your guest login and password for CM/ECF for the Western District of Wisconsin are:

Please acknowledge your receipt of these documents by file stamping the enclosed copy of this letter and returning same in the envelope provided.

Very truly yours,

THERESA M. OWENS, CLERK

By:

Calvin R. W...
Deputy Clerk

Enclosure

cc: Anthony Tomaselli
Claude Stern
Evette Pennypacker
Michael Powell
Paul Linn

CV 08-930 JCS

**U.S. District Court
Western District of Wisconsin (Madison)
CIVIL DOCKET FOR CASE #: 3:07-cv-00613-jcs
Internal Use Only**

Kraft Foods Holdings Inc v. Procter & Gamble Company The
Assigned to: Judge John C Shabaz
Cause: 28:1338 Patent Infringement

Date Filed: 10/26/2007
Jury Demand: Plaintiff
Nature of Suit: 830 Patent
Jurisdiction: Federal Question

Plaintiff

Kraft Foods Holdings Inc

CV 08 0930
represented by **Anthony A. Tomaselli**

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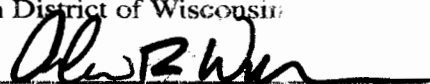
FEB 06 2008

Theresa M. Owens, Clerk

U.S. District Court

Western District of Wisconsin

By



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V.

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Counter Claimant

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V.

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Counter Defendant

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Kraft Foods Holdings Increpresented by **Anthony A. Tomaselli**
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ATTORNEY TO BE NOTICED**Michael Daniel Powell**
(See above for address)
ATTORNEY TO BE NOTICED

Date Filed	#	Docket Text
10/26/2007	●1	COMPLAINT against Procter & Gamble Company The (Filing fee \$350 receipt number 64386) (Attachments: #1 Exhibit A-Patent Number 7,074,443; #2 JS-44 Civil Cover Sheet), filed by Kraft Foods Holdings Inc. (mcb) (Entered: 10/29/2007)
10/26/2007	●2	Standard attachments for Judge John C. Shabaz sent. (Attachments: #(1) NORTC #(2) JCS Order Re: Dispositive Motions #(3) Disclosure of Corporate Affiliations #(4) Briefing Guidelines.) (mcb) (Entered: 10/29/2007)
10/26/2007	●3	Corporate Disclosure Statement by Plaintiff Kraft Foods Holdings Inc. (mcb) (Entered: 10/29/2007)
10/29/2007	●	(Court only) *** Set Tickler **30-day Inactivity due 11/26/2007** (mcb) (Entered: 10/29/2007)
10/31/2007	●4	MOTION to Admit Claude M. Stern, Evette D. Pennypacker, and Michael D. Powell Pro Hac Vice by Plaintiff Kraft Foods Holdings Inc. (mcb) (Entered: 10/31/2007)
10/31/2007	●	(Court only) *** Set Tickler [4] MOTION to Admit Claude M. Stern, Evette D. Pennypacker, and Michael D. Powell Pro Hac Vice. Activity on motion by 11/6/2007.**** (mcb) (Entered: 10/31/2007)
10/31/2007	●5	Corporate Disclosure Statement by Defendant Procter & Gamble Company. (llj) (Entered: 11/01/2007)
10/31/2007	●6	ANSWER to Complaint, THIRD PARTY COMPLAINT against KRAFT FOODS GLOBAL, INC., COUNTERCLAIM against KRAFT FOODS GLOBAL, INC., Kraft Foods Holdings Inc by Defendant The Procter & Gamble Company. (llj) (Entered: 11/01/2007)
11/02/2007	●7	ORDER granting [4] Motion to Admit Claude M. Stern, Evette Pennypacker and Michael Powell Pro Hac Vice Signed by Judge John C Shabaz on

11/06/2007	●8	SUMMONS Returned Executed by Plaintiff Kraft Foods Holdings Inc, Defendant The Procter & Gamble Company. The Procter & Gamble Company served on 10/29/2007, answer due 11/19/2007. (elc) (Entered: 11/06/2007)
11/08/2007	●	Set/Reset Pretrial Conference: [JCS Order Governing Pretrial Conference attached] Pretrial Conference set for 11/27/2007 at 08:30 AM. (llj) (Entered: 11/08/2007)
11/13/2007	●9	ACKNOWLEDGEMENT OF SERVICE Executed, filed by Third-Party Defendant KRAFT FOODS GLOBAL, INC. (llj) (Entered: 11/15/2007)
11/21/2007	●10	PRELIMINARY PRETRIAL CONFERENCE REPORT by Defendant The Procter & Gamble Company. (llj) (Entered: 11/23/2007)
11/21/2007	●11	PRELIMINARY PRETRIAL CONFERENCE REPORT by ThirdParty Defendant KRAFT FOODS GLOBAL, INC., Plaintiff Kraft Foods Holdings Inc. (llj) (Entered: 11/23/2007)
11/26/2007	●	(Court only) ***Attorney Claude M. Stern for Kraft Foods Holdings Inc added. (llj) (Entered: 11/26/2007)
11/26/2007	●	(Court only) ***Attorney Evette D. Pennypacker for Kraft Foods Holdings Inc, Michael D. Powell for Kraft Foods Holdings Inc added. (llj) (Entered: 11/26/2007)
11/27/2007	●	Minute Entry for proceedings held before Judge John C Shabaz : Telephone Preliminary Pretrial Conference held on 11/27/2007 [:15] (mfh) (Entered: 11/27/2007)
11/27/2007	●12	PRETRIAL CONFERENCE ORDER - Amendments to Pleadings due by 12/27/2007,Dispositive Motions due by 5/1/2008,Final Pretrial Conference set for 8/6/2008 01:00 at PM,Final Pretrial Submissions due 7/30/2008,Jury Selection and Trial set for 9/8/2008 at 09:00 AM,Activity by 7/10/2008 Signed by Judge John C Shabaz on 11/27/2007. (llj) (Entered: 11/27/2007)
11/29/2007	●13	MOTION to Dismiss or in the alternative transfer or stay by Counter Defendants KRAFT FOODS GLOBAL, INC., Kraft Foods Holdings Inc. Brief in Opposition due by 12/19/2007. Brief in Reply due by 12/31/2007. (elc) (Entered: 11/30/2007)
11/29/2007	●14	AFFIDAVIT of Evette D. Pennypacker re: [13] MOTION to Dismiss filed by KRAFT FOODS GLOBAL, INC., Kraft Foods Holdings Inc (elc) (Entered: 11/30/2007)
11/29/2007	●15	Request for Judicial Notice by KRAFT FOODS GLOBAL, INC. and Kraft Foods Holdings Inc. (elc) (Entered: 11/30/2007)
11/29/2007	●16	Corrected Corporate Disclosure Statement by Plaintiff Kraft Foods Holdings Inc. (elc) (Entered: 11/30/2007)
12/19/2007	●17	BRIEF in Opposition by ThirdParty Plaintiff The Procter & Gamble Company, Counter Claimant The Procter & Gamble Company, Defendant The Procter & Gamble Company re: [13] MOTION to Dismiss filed by KRAFT FOODS GLOBAL, INC., Kraft Foods Holdings Inc (Linn, Paul) (Entered: 12/19/2007)

12/19/2007	●18	MOTION for Miscellaneous Relief by Third-Party Plaintiff The Procter & Gamble Company, Counter-Claimant The Procter & Gamble Company, Defendant The Procter & Gamble Company, re: [13] MOTION to Dismiss filed by KRAFT FOODS GLOBAL, INC, Kraft Food Holdings, Inc. <i>Request for Judicial Notice</i> (Linn, Paul) <i>DOCKET ENTRY CORRECTED TO STATE MOTION FOR MISC. RELIEF</i> Modified on 12/21/2007 (Wiseman, Andrew). (Entered: 12/19/2007)
12/19/2007	●19	AFFIDAVIT of Ben M. Davidson filed by Third-Party Plaintiff The Procter & Gamble Company, Counter-Claimant The Procter & Gamble Company, Defendant The Procter & Gamble Company, re: [13] MOTION to Dismiss filed by KRAFT FOODS GLOBAL, INC., Kraft Foods Holdings, Inc. (Attachments: # <u>1</u> Copy of the Affidavit # <u>2</u> Exhibit 1 # <u>3</u> Exhibit 2 # <u>4</u> Exhibit 3 # <u>5</u> Exhibit 4 # <u>6</u> Exhibit 5 # <u>7</u> Exhibit 6 # <u>8</u> Exhibit 7 # <u>9</u> Exhibit 8 # <u>10</u> Exhibit 9 # <u>11</u> Exhibit 10 # <u>12</u> Exhibit 11 # <u>13</u> Exhibit 12 # <u>14</u> Exhibit 13 # <u>15</u> Exhibit 14 # <u>16</u> Exhibit 15 # <u>17</u> Exhibit 16 # <u>18</u> Exhibit 17 # <u>19</u> Exhibit 18 # <u>20</u> Exhibit 19 # <u>21</u> Exhibit 20 # <u>22</u> Exhibit 21 # <u>23</u> Exhibit 22 # <u>24</u> Exhibit 23) (Linn, Paul) Modified on 12/21/2007 (Wiseman, Andrew). (Entered: 12/19/2007)
12/19/2007	●20	CERTIFICATE OF SERVICE by Third-Party Plaintiff The Procter & Gamble Company, Counter-Claimant The Procter & Gamble Company, Defendant The Procter & Gamble Company, re <u>17</u> Brief in Opposition, <u>18</u> Motion for Miscellaneous Relief, <u>19</u> Affidavit. (Linn, Paul) Modified on 12/21/2007 (Wiseman, Andrew). (Entered: 12/19/2007)
12/26/2007	●21	AMENDED COMPLAINT against The Procter & Gamble Company, filed by Kraft Foods Holdings Inc. (Attachments: # <u>1</u> Exhibit A to Amended Complaint) (Pennypacker, Evette) <i>INCORRECT SIGNATURE; ATTORNEY CONTACTED</i> . Modified on 12/27/2007 (Wiseman, Andrew). (Entered: 12/26/2007)
12/27/2007	●22	CERTIFICATE OF SERVICE by Plaintiff Kraft Foods Holdings Inc re <u>21</u> Amended Complaint (Pennypacker, Evette) (Entered: 12/27/2007)
12/27/2007	●23	AMENDED COMPLAINT against The Procter & Gamble Company, filed by Kraft Foods Holdings Inc. (Attachments: # <u>1</u> Exhibit A) (Pennypacker, Evette) (Entered: 12/27/2007)
12/27/2007	●24	CERTIFICATE OF SERVICE by Plaintiff Kraft Foods Holdings Inc re <u>23</u> Amended Complaint (Pennypacker, Evette) (Entered: 12/27/2007)
01/02/2008	●25	BRIEF in Reply in Support re: [13] MOTION to Dismiss filed by KRAFT FOODS GLOBAL, INC., Kraft Foods Holdings Inc (Pennypacker, Evette) (Entered: 01/02/2008)
01/02/2008	●26	BRIEF in Reply in Support re: [13] MOTION to Dismiss filed by KRAFT FOODS GLOBAL, INC., Kraft Foods Holdings Inc (<i>Reply Declaration of Evette D. Pennypacker</i>) (Pennypacker, Evette) <i>INCORRECT DOCKET ENTRY; ATTORNEY CONTACTED</i> Modified on 1/3/2008 (Wiseman, Andrew). (Entered: 01/02/2008)
01/03/2008	●27	AFFIDAVIT of Evette D. Pennypacker filed by Counter Defendants KRAFT FOODS GLOBAL, INC., Kraft Foods Holdings Inc <i>in support of reply</i> re: [13] MOTION to Dismiss filed by KRAFT FOODS GLOBAL, INC., Kraft Foods Holdings Inc (Pennypacker, Evette) (Entered: 01/03/2008)
01/07/2008	●	(Court only) ***Set/Clear Flags: UA flag added. (llj) (Entered: 01/07/2008)

01/07/2008		(Court only) Motions Taken Under Advisement [13] MOTION to Dismiss (llj) (Entered: 01/07/2008)
01/09/2008	● <u>28</u>	MOTION for Oral Argument by Third-Party Plaintiff The Procter & Gamble Company, Counter-Claimant The Procter & Gamble Company, Defendant The Procter & Gamble Company. (Attachments: # <u>1</u> Exhibit A) (Linn, Paul) <i>DOCKET TEXT MODIFIED</i> on 1/11/2008 (Wiseman, Andrew). (Entered: 01/09/2008)
01/09/2008	● <u>29</u>	CERTIFICATE OF SERVICE by Third-Party Plaintiff The Procter & Gamble Company, Counter-Claimant The Procter & Gamble Company, Defendant The Procter & Gamble Company re <u>28</u> MOTION for Oral Argument (Linn, Paul) <i>DOCKET TEXT MODIFIED</i> on 1/11/2008 (Wiseman, Andrew). (Entered: 01/09/2008)
01/09/2008	● <u>30</u>	ANSWER to Amended Complaint, THIRD PARTY COMPLAINT against KRAFT FOODS GLOBAL, INC., Kraft Foods Holdings, Inc., COUNTERCLAIM against KRAFT FOODS GLOBAL, INC., Kraft Foods Holdings, Inc., by Third Party Plaintiff The Procter & Gamble Company, Counter Claimant The Procter & Gamble Company, Defendant The Procter & Gamble Company. (Linn, Paul) Modified on 1/14/2008 (Wiseman, Andrew). (Entered: 01/09/2008)
01/09/2008	● <u>31</u>	CERTIFICATE OF SERVICE by Third Party Plaintiff The Procter & Gamble Company, Counter Claimant The Procter & Gamble Company, Defendant The Procter & Gamble Company re <u>30</u> Answer to Amended Complaint, Third Party Complaint, Counterclaim (Linn, Paul) Modified on 1/14/2008 (Wiseman, Andrew). (Entered: 01/09/2008)
01/11/2008	● <u>32</u>	BRIEF in Opposition by Counter Defendants KRAFT FOODS GLOBAL, INC., Kraft Foods Holdings Inc re: <u>28</u> MOTION <i>Request for Oral Argument</i> filed by The Procter & Gamble Company (Pennypacker, Evette) (Entered: 01/11/2008)
01/25/2008	● <u>33</u>	ORDER granting in part and denying in part [13] Motion to Dismiss, Transer or Stay; denying as moot <u>28</u> Motion for Oral Argument. Signed by Judge John C Shabaz on 1/24/2008. (arw) (Entered: 01/25/2008)

33
DOCKET #
U.S. DISTRICT COURT
WEST. DIST. OF WISCONSIN

JAN 25 2008

FILED
THERESA M. OWENS, CLERK
CASE #

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

KRAFT FOODS HOLDINGS, INC.,

Plaintiff,

v.

MEMORANDUM AND ORDER
07-cv-613-jcs

THE PROCTOR & GAMBLE COMPANY,

Defendant/Counterclaim Plaintiff

v.

KRAFT FOODS HOLDINGS, INC.,

Counterclaim Defendant

and

KRAFT FOODS GLOBAL, INC.

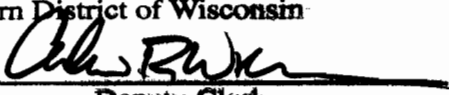
Third-Party Defendant.

Plaintiff Kraft Foods Holding, Inc. ("KFH") commenced this patent infringement action alleging that defendant the Proctor and Gamble Company ("P&G") has infringed on KFH's United States Patent number 7,074,443 (hereinafter the '443 patent) as infringement is defined under 35 U.S.C. § 271. P&G responded by filing a counterclaim and a third party complaint against KFH and Kraft Foods Global, Inc. ("Global") alleging that KFH and Global have infringed on P&G's United States Patent number 7,169,419 (hereinafter the '419 patent). Jurisdiction is based on 28 U.S.C. §§ 1331 and 1338(a). The matter is currently before the Court on plaintiff's motion to dismiss or in the alternative transfer or

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Theresa M. Owens, Clerk
U.S. District Court
Western District of Wisconsin

By


Deputy Clerk

stay defendant Proctor & Gamble Company's counterclaim and third party complaint. The following facts relevant to plaintiff's pending motion are undisputed.

BACKGROUND

Both KFH and Global (collectively "Kraft") are Delaware corporations with their principal places of business in Northfield, Illinois. P&G is an Ohio corporation with its principal place of business in Cincinnati, Ohio. Kraft and P&G are competitors in the United States market for ground roast coffee.

KFH is the assignee of the '443 patent, which is a patent directed to a spacing structure placed in the overcap of a coffee container to prevent the vent valve in the flexible peel-off lid on the container from being closed due to contact with the overcap. P&G is the assignee of both United States Patent number 7,169,418 (hereinafter the '418 patent) and the '419 patent. Both the '418 and '419 patents are directed to a packaging system to provide fresh packaged coffee.

Both the '418 and '419 patents share a parent patent application. The '418 patent arose completely from patent application number 10/155,338 (hereinafter the '338 application). The '419 patent was applied for as a "continuation-in-part" of the '338 application, which means that it repeats portions of the '338 application and adds new disclosures. Although the '419 patent mirrors the '418 patent in many ways it also has its differences.

One difference is the '419 patent's addition of a "stand-off [to] prevent blockage of a valve disposed on and/or within a flexible film" '419 patent col. 13, ll. 29-30.

On January 31, 2007 Kraft filed a petition for inter partes reexamination with the United States Patent and Trademark Office ("PTO") requesting that the '418 patent's claims be found invalid as obvious. The PTO denied Kraft's request. After the PTO denial, P&G filed an action against Kraft in the United States District Court for the Northern District of California alleging that sales of Kraft's 39-ounce plastic containers of Maxwell House brand coffee infringe the '418 patent (hereinafter the "California action"). P&G sought a preliminary injunction in the California action, but Judge Phyllis J. Hamilton ordered the case stayed until Kraft exhausted its appeal of the PTO's decision.

On October 26, 2007 KFH filed the current infringement action against P&G in the Western District of Wisconsin alleging that P&G's vented coffee container infringes on the '443 patent. On October 31, 2007 P&G filed its answer and asserted a counterclaim against KFH as well as a third party claim against Global alleging that sales of Kraft's 39-ounce plastic containers of Maxwell House brand coffee infringe on the '419 patent. On November 29, 2007 Kraft filed a motion to dismiss P&G's counterclaim and third party complaint without prejudice or in the alternative to stay the

counterclaim and third party complaint or transfer them to the Northern District of California.

MEMORANDUM

Kraft argues that P&G's counterclaim and third party claim must be dismissed without prejudice as duplicative of the California action. Kraft further argues that if dismissal is not appropriate then the counterclaim and third party claim should be stayed or transferred to the Northern District of California because the outcome concerning the '418 patent in the California action will affect an infringement determination concerning the '419 patent. Conversely, P&G argues that its counterclaim and third party claim for infringement of the '419 patent are correctly a part of the current action because the '419 patent addresses a similar invention as the '443 patent (i.e., the patent in suit).

Kraft's argument for dismissal without prejudice is not persuasive for such a dismissal would not serve judicial economy. Should P&G's counterclaim and third party claim for infringement of the '419 patent be dismissed without prejudice there is nothing preventing it from refileing the same claim in this Court and starting from the beginning. Accordingly, it would not serve judicial economy to dismiss the counterclaim and third party claim without prejudice.

Kraft's argument for a stay of P&G's infringement counterclaim and third party claim is also not persuasive. Should P&G's infringement claim be stayed pending determinations in the California action or pending determinations by the PTO, the claim could remain long after the infringement claim concerning the '443 patent is terminated. Having P&G's infringement claim pending here and in California serves no purpose. Accordingly, it does not serve judicial economy to stay P&G's counterclaim and third party claim.

What remains is Kraft's request that P&G's counterclaim and third party claim for infringement be transferred to the Northern District of California where it could be consolidated with the California action addressing infringement of the '418 patent. Before the Court could transfer the counterclaim and third party claim for infringement the claims would have to be severed from this case. Under Federal Rule of Civil Procedure 21 a court may sever any claim against a party. The Seventh Circuit has reasoned that "a district court may sever claims under Rule 21, creating two separate proceedings, so long as the two claims are 'discrete and separate,'" (i.e., "one claim must be capable of resolution despite the outcome of the other claim"). Gaffney v. Riverboat Serv. of Ind., Inc., 451 F.3d 424, 442 (7th Cir. 2006) cert. denied, 127 S. Ct. 933 (2007) (quoting Rice v. Sunrise Express, Inc., 209 F.3d 1008, 1016 (7th Cir. 2000)).

In this case, P&G's counterclaim and third party claim for infringement of the '419 patent are "discrete and separate" from Kraft's claim for infringement of the '443 patent. Kraft's infringement claim can be resolved regardless of the outcome of P&G's infringement claim. In fact, it is possible that Kraft's coffee container could infringe the '419 patent and that P&G's coffee container could infringe the '443 patent as well. Accordingly, severance of P&G's counterclaim and third party claim for infringement is permissible.

Severing P&G's counterclaim and third party claim for infringement allows the Court to address whether those claims should be transferred to the Northern District of California. A motion for transfer of venue is governed by 28 U.S.C. § 1404(a) which states: "[f]or the convenience of parties and witnesses, in the interest of justice, a district court may transfer any civil action to any other district or division where it might have been brought." For transfer of venue to be proper it must be established that the case might have been brought in the transferee district and that the transfer is for the convenience of parties and witnesses and in the interest of justice. See Coffey v. Van Dorn Iron Works, 796 F.2d 217, 220 (7th Cir. 1986). Here, there is no dispute that P&G could have brought its counterclaim and third party claim in the Northern District of California. Accordingly,

the Court's inquiry focuses solely on "the conveniences of parties and witnesses, in the interest of justice." 28 U.S.C. § 1404(a).

In ruling on Kraft's motion to transfer venue the Court must consider all circumstances of the case using the three statutory factors as place holders in its analysis. Coffey, 796 F.2d at 219. Also, Kraft, as the moving party, bears the burden to establish by reference the particular circumstances that the transferee forum is clearly more convenient. Id. at 219-220.

Kraft cannot claim the Northern District of California as its home forum. Also, the Western District of Wisconsin is not P&G's home forum which means that P&G's choice of forum receives no special deference. Doagle v. Bd. of Regents, 950 F. Supp. 258, 259 (N.D. Ill. 1997). The Court then accepts each party's assessment of its own convenience. Furthermore, no significant witnesses for whom in court testimony would be necessary are located within either district. Accordingly, the convenience of the parties and witnesses does not weigh in favor of either district and does not clearly favor transfer. See In re Nat'l Presto Indus., Inc., 347 F.3d 662, 665 (7th Cir. 2003).

The interests of justice factor is determinative in this case. See Coffey, 796 F.2d at 220. The interests of justice analysis involves the consideration of factors relating to "the efficient administration of the court system' not to the merits of the underlying dispute." Milwaukee Elec. Tool Corp. v. Black & Decker

(N.A.) Inc., 392 F. Supp. 2d 1062, 1065 (W.D. Wis. 2005) (quoting Coffey, 796 F.2d at 221). For example, two permissible factors are the likelihood of a speedy trial and the feasibility of consolidation of related litigation. Coffey, 796 F.2d at 221.

P&G argues that the interest of justice does not favor transfer because its counterclaim and third party claim for infringement of the '419 patent involves the same technology as Kraft's claim for infringement of the '443 patent. As previously explained P&G's infringement counterclaim and third party claim are discrete and separate from Kraft's infringement claim regardless of any similar technology. The separateness of the claims further supports that a detailed examination of the '419 patent is not necessary to address infringement of the '443 patent and vice versa. Also, the "technology" (i.e., a space in a cover to prevent the cover from touching and in effect closing a valve in a peel-off lid) is not complex but something that is easily comprehended by any judge. Accordingly, the similar technology involved does not support that the interests of justice disfavor transfer.

Although P&G mentions the speed of this Court's docket¹ as one reason why the interests of justice do not favor transfer, it does not elaborate why docket speed is necessary in this case. It is not disputed that the parties sell competing coffee containers but

¹P&G placed in a footnote that this district's median time to trial is 11.4 months compared to 27 months for the Northern District of California.

P&G does not explain why it could not be readily compensated by a reasonable royalty. Accordingly, P&G has failed to provide reasoning which supports giving much weight to the speedy trial factor. See Encyclopaedia Britannica, Inc. v. Magellan Navigation, Inc., 512 F. Supp. 2d 1169, 1176 (W.D. Wis. 2007).

Kraft argues that transfer will serve judicial economy because P&G's counterclaim and third party claim for infringement of the '419 patent can be consolidated with the California action. Transfer and consolidation of actions involving common questions of law or fact support judicial economy and favor transfer in the interests of justice. Id. The facts and circumstances surrounding P&G's counterclaim and third party claim for infringement of the '419 patent weigh heavily in favor of transfer to conserve judicial resources through consolidation.

First, it would serve practicality to consolidate P&G's counterclaim and third party claim with the California action. The parties in both actions are the same, i.e., P&G versus Kraft. Also, there will be common questions of law and fact because each action involves the same potentially infringing product, i.e., Kraft's 39-ounce plastic containers of Maxwell House brand coffee. The '418 and '419 patents in each action share claim language and a parent patent application, i.e., the '338 patent application.

Furthermore, discovery concerning the '418 and '419 patents will be intertwined. The history of each patent will require

information about the '338 patent application. Also, as a "continuation-in-part" the '419 patent shares a common inventor with the '418 patent and it shares drawings as well as specification and claim language. Accordingly, coordinating discovery in one district would promote efficiency among the parties as well as avoid duplication of discovery among the parties concerning related patents.

Finally, if P&G's counterclaim and third party claim for infringement of the '419 patent is not transferred and consolidated there remains a risk of inconsistent claim construction and inconsistent judgments. See Encyclopaedia, 512 F. Supp. 2d at 1177. The Federal Circuit has explained that in construing a term found in claims in separate patents that were formed from a parent patent application "it would be improper to construe [the] term differently in one patent than another, given their common ancestry." Abtox, Inc. v. Exitron Corp., 131 F.3d 1009, 1010 (Fed. Cir. 1997). The reasoning in Abtox requires that the terms found in the '419 patent which are also found in the '418 patent shall be construed to have the same meaning in both patents because they both refer to the '338 patent application as their parent patent application. Id. The requirement that terms be construed to have the same meaning in patents sharing a common ancestry means that separate construction of the '419 patent's claims that contain terms used in the '418 patent's claims could lead to inconsistent

claim construction and inconsistent judgments concerning the patents. Accordingly, having the same court construe the claims of the '418 patent as well as the claims of the '419 patent would provide a more efficient administration of the court system by avoiding both inconsistent claim construction and inconsistent judgments.

Based on the present facts and circumstances, balancing the weight of a speedier disposition in this district against the weight of transferring and consolidating P&G's counterclaim and third party claim with the California action in an effort to best serve judicial and litigant economy and efficiency, tips the scale overwhelmingly toward the interests of justice which favors transfer to the Northern District of California. Accordingly, Kraft has demonstrated that the Northern District of California is clearly the more convenient forum and its motion to transfer venue to that district must be granted.

ORDER

IT IS ORDERED that defendant's counterclaim and third party claim for infringement of the '419 patent is SEVERED from the current action.

IT IS FURTHER ORDERED that plaintiff's motion to transfer venue to the Northern District of California is GRANTED as it

relates to the severed counterclaim and third party claim for infringement of the '419 patent.

IT IS FURTHER ORDERED that plaintiff's motion to dismiss or stay is DENIED.

IT IS FURTHER ORDERED that defendant's motion for oral argument is DENIED as moot.

Entered this 24th day of January, 2008.

BY THE COURT:

/s/

JOHN C. SHABAZ
District Judge

1

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

KRAFT FOODS HOLDINGS, INC.,

Plaintiff,

v.

THE PROCTER & GAMBLE COMPANY,

Defendant.

07 C 0613 S

Case No. _____
Jury Trial Demanded

COMPLAINT AND DEMAND FOR JURY TRIAL

For its Complaint against defendant The Procter & Gamble Company ("Defendant"), plaintiff Kraft Foods Holdings, Inc. ("Kraft") alleges as follows:

PARTIES

1. Kraft is a Delaware corporation with its principal place of business in Northfield, Illinois.
2. On information and belief, Defendant is a an Ohio corporation with its principal place of business in Cincinnati, Ohio.

JURISDICTION AND VENUE

3. This Court has subject matter jurisdiction over this action as it arises under the federal patent laws of the United States of America. 28 U.S.C. §§ 1331 and 1338(a). The Court has personal jurisdiction over Defendant because Defendant has systematic and continuous contacts with the State of Wisconsin and with this judicial district such that the exercise of jurisdiction over Defendant does not offend traditional notions of fair play and substantial justice.

4. Venue is proper in this judicial district because on information and belief Defendant manufactures, sells and/or distributes infringing products that are sold in this district. 28 U.S.C. § 1331, 1391(b), (c), and 1400(b).

INFRINGEMENT OF U.S. PATENT NO. 7,074,443

5. On July 11, 2006, the United States Patent & Trademark Office duly and legally issued United States Patent No. 7,074,443 (the "'443 Patent"), entitled "Vented Can Overcap." Kraft is the owner by assignment of the '443 Patent, a true and correct copy of which is attached as Exhibit A.

6. On information and belief, Defendant has infringed and continues to infringe the '443 Patent by, among other things, making, using, offering for sale, and/or selling, or inducing others to make, use, offer for sale, and/or sell, plastic containers containing Defendant's Folgers brand coffee within the United States that are within the scope of one or more claims of the '443 Patent. Defendant is therefore liable for infringement of the '443 Patent. 35 U.S.C. § 271.

7. Defendant's acts of infringement have caused and are continuing to cause monetary damage to Kraft in an amount to be determined at trial. In addition to monetary damages, Defendant's infringement has caused and will, unless enjoined, continue to cause irreparable harm to Kraft's business.

8. On information and belief, to the extent any marking was required by 35 U.S.C. § 287, such requirements have been met and Kraft is entitled to recover damages for infringement occurring prior to the filing of this action in an amount to be proven at trial.

PRAYER OF RELIEF

WHEREFORE, Kraft prays for the following relief:

1. Judgment in favor of Kraft finding that Defendant has directly and/or indirectly infringed the '443 Patent;
2. A preliminary and permanent injunction enjoining Defendant and its officers, directors, agents, servants, affiliates, employees, divisions, branches, subsidiaries, parents, and

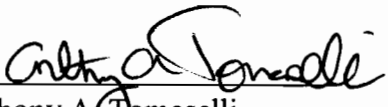
all others acting in concert or privity with any of them, from any further infringement of the '443 Patent.

3. An award of damages, attorneys' fees, costs and expenses as permitted by law;
4. An award of pre-judgment and post-judgment interest; and
5. For all other relief to which the Court may deem just and proper.

DEMAND FOR JURY TRIAL

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Kraft requests a trial by jury of any and all issues so triable by right.

Dated: 10/26/07


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US007074443B2

(12) **United States Patent**
Thomas et al.

(10) **Patent No.:** **US 7,074,443 B2**
 (45) **Date of Patent:** **Jul. 11, 2006**

(54) **VENTED CAN OVERCAP**

(75) Inventors: **Jeffrey A. Thomas**, Cortlandt Manor, NY (US); **Jeffrey Alan Zimmermann**, Purdys, NY (US); **Piras DeCleur**, Sleepy Hollow, NY (US); **Mete Bruncaj**, Briarcliff Manor, NY (US)

(73) Assignee: **Kraft Foods Holdings, Inc.**, Northfield, IL (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(h) by 348 days.

(21) Appl. No.: **10/298,565**

(22) Filed: **Nov. 19, 2002**

(65) **Prior Publication Data**

US 2004/0096552 A1 May 20, 2004

(51) **Int. Cl.**
B65D 51/16 (2006.01)

(52) **U.S. Cl.** **426/118; 426/131; 426/595;**
 220/203.01; 220/203.29

(58) **Field of Classification Search** **426/106;**
426/118, 131, 395, 594-595; 220/202, 203.01,
220/203.09, 203.29

See application file for complete search history.

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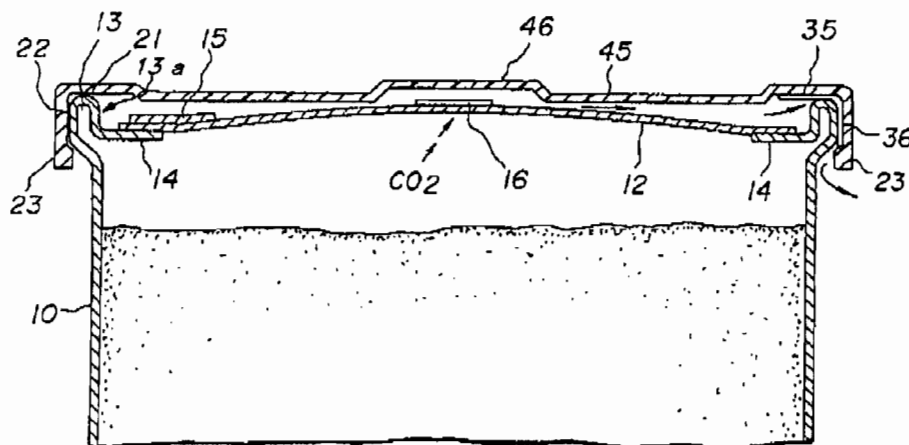
Primary Examiner—Drew Becker

(74) *Attorney, Agent, or Firm*—Stites & Harbison PLLC, Marvin Petry

(57) **ABSTRACT**

Packaging for a can containing ground roasted coffee packed under atmospheric pressure and having a flexible peel-off lid which is vented to allow the escape of a buildup of carbon dioxide gases. A spacing structure prevents the vent valve in the lid from being closed by contact with the plastic overcap. The spacing structure may include bosses on the overcap which engage the vent valve or a pocket in the overcap which allows the flexible lid to reach a maximum height without engaging the overcap. A permanently opened passageway may be provided between the plastic overcap and the rim of the can to further facilitate the escape of carbon dioxide.

25 Claims, 6 Drawing Sheets



EXHIBIT

A

U.S. Patent

Jul. 11, 2006

Sheet 2 of 6

US 7,074,443 B2

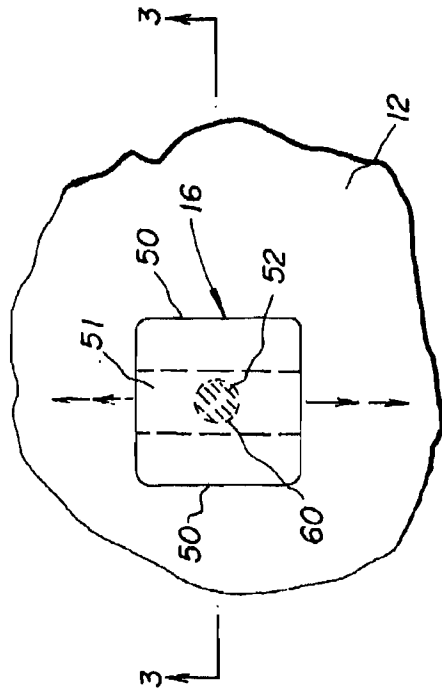


FIG. 2
PRIOR ART

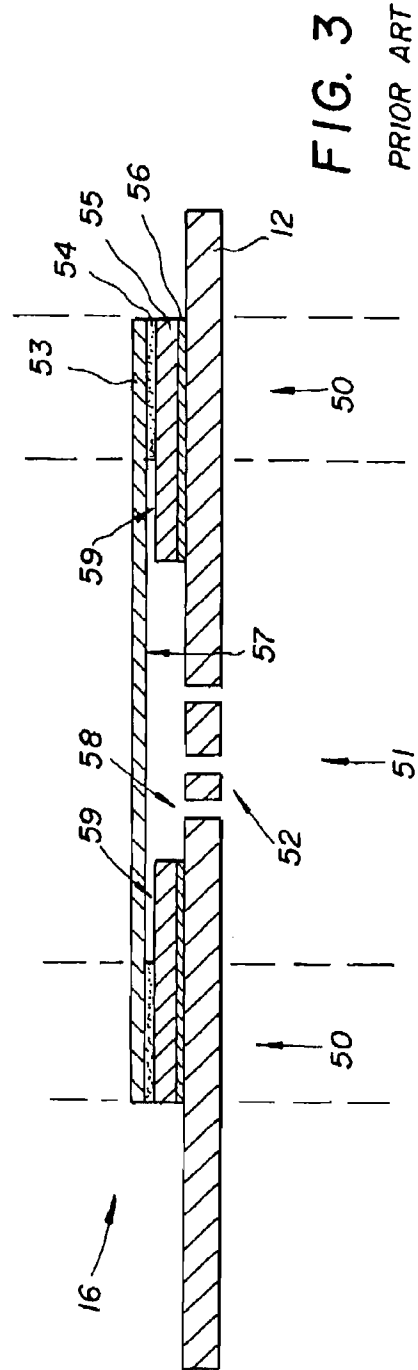


FIG. 3
PRIOR ART

U.S. Patent

Jul. 11, 2006

Sheet 3 of 6

US 7,074,443 B2

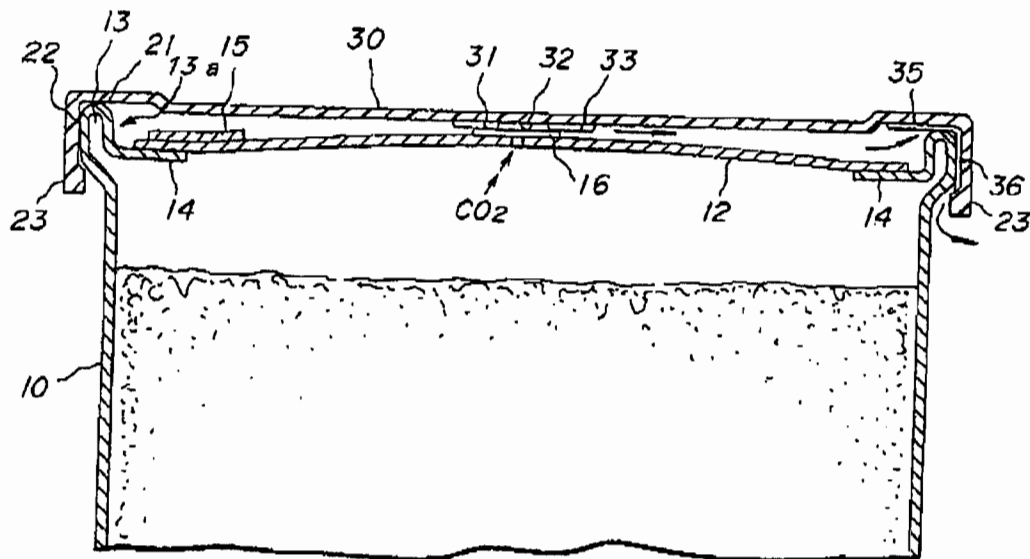


FIG. 4

U.S. Patent

Jul. 11, 2006

Sheet 4 of 6

US 7,074,443 B2

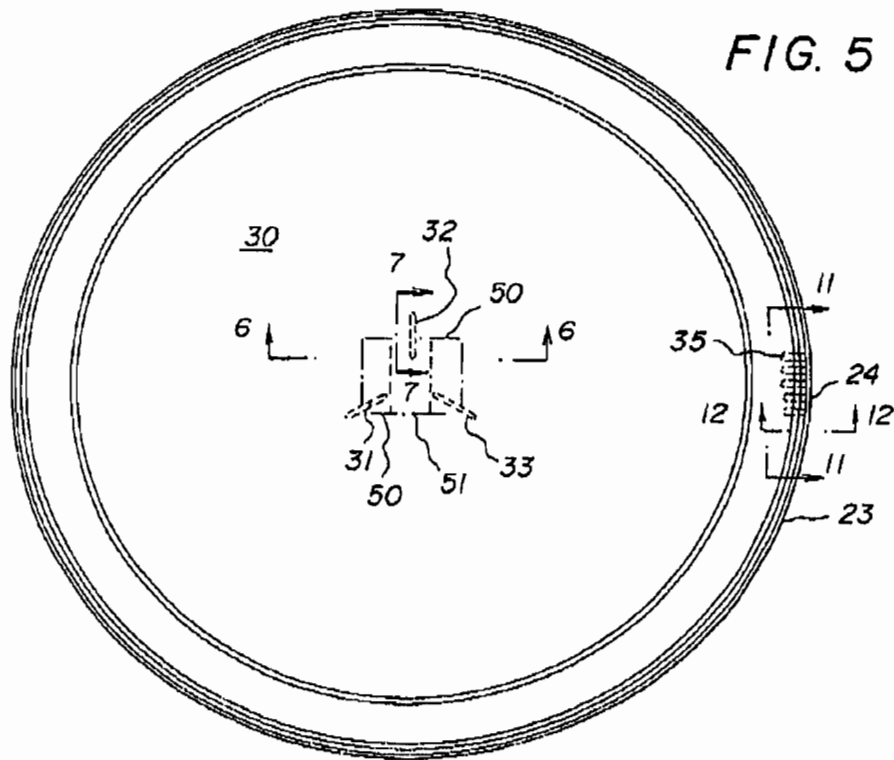


FIG. 6

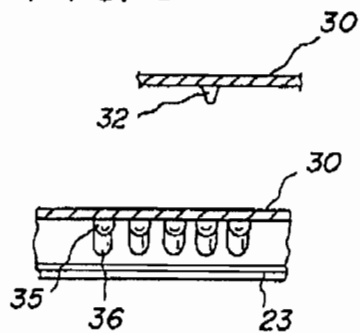


FIG. 11

FIG. 7

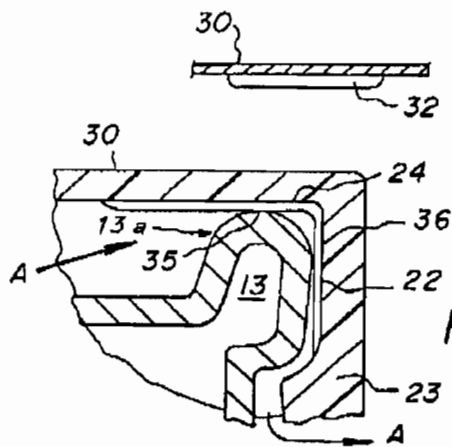


FIG. 12

U.S. Patent

Jul. 11, 2006

Sheet 5 of 6

US 7,074,443 B2

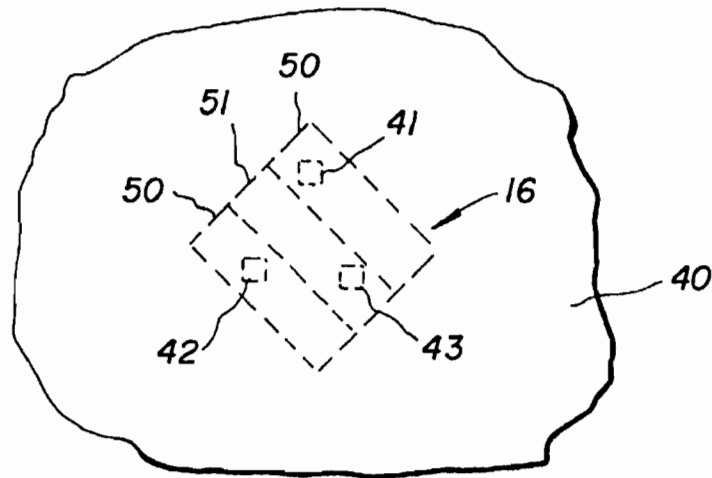


FIG. 8

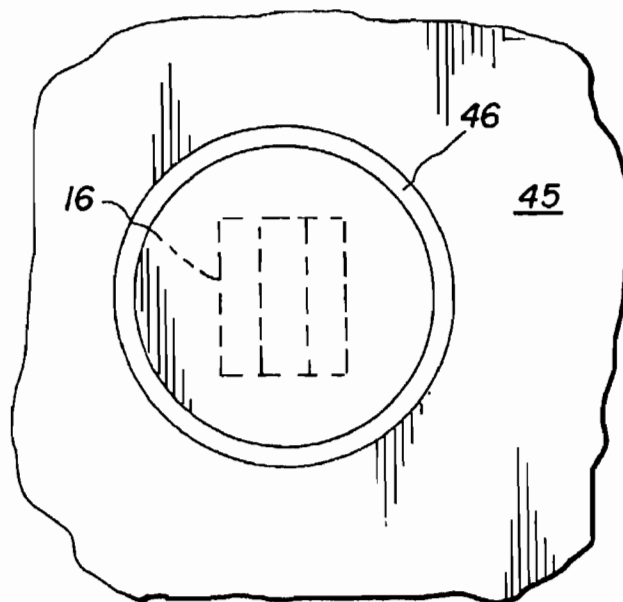


FIG. 10

U.S. Patent

Jul. 11, 2006

Sheet 6 of 6

US 7,074,443 B2

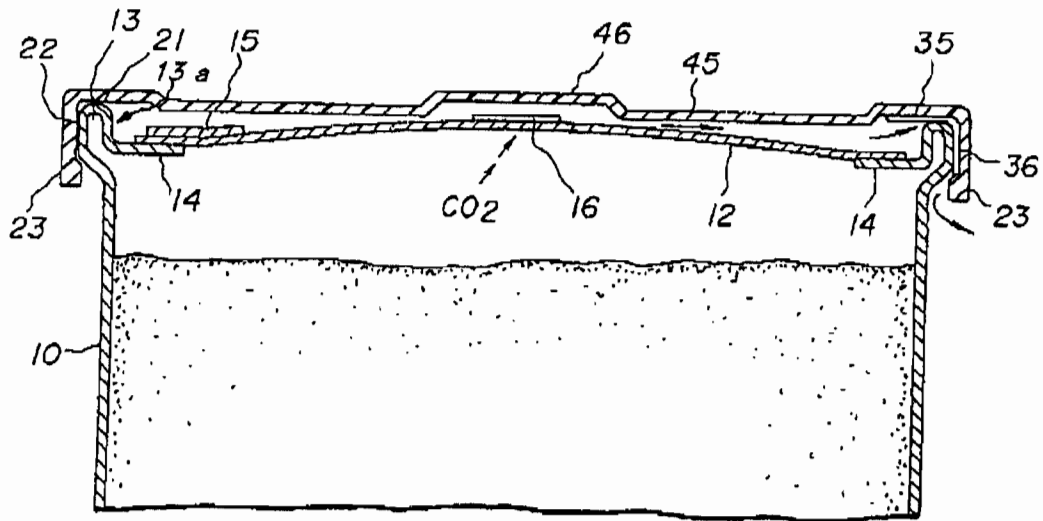


FIG. 9

US 7,074,443 B2

1

VENTED CAN OVERCAP**FIELD OF THE INVENTION**

This invention relates to a canned product which generates a gaseous pressure buildup, and to an improved arrangement for venting such gases.

BACKGROUND OF THE INVENTION

Historically, ground roast coffee packaged in a can has been vacuum packed. Recently, it has been found desirable to freshly package roast ground coffee in cans or other rigid or semi-rigid gas impervious packages under atmospheric pressure as contrasted to the prior vacuum packaged cans. Additionally, it has also been found desirable to close off the top of the can with a flexible peel-off easy opening seal or lid, whether the coffee was packed under a vacuum or atmospheric pressure. Examples of such peel-off easy opening lids are shown in the Bolton et al U.S. Pat. No. 5,688,544.

Packaged ground roast coffee gives off carbon dioxide which, in a sealed confined space will generate a pressure buildup within the container. In the case of vacuum packed ground roast coffee, this generation of carbon dioxide causes no problem because the pressure buildup simply tended to reduce the negative pressure within the sealed container. However, if the product is freshly packaged initially at atmospheric pressure without extensive degassing, then generated carbon dioxide will cause a pressure buildup in the can above atmospheric pressure. In atmospheric pressure packed ground roasted coffee cans now on the market, this pressure buildup caused by the generated carbon dioxide is dealt with by simply placing a vent valve in the top of the can. If the can is of a type having a flexible peel-off seal, the vent valve will be built directly into the flexible peel-off lid.

It is also highly desirable, if not a commercial necessity, to include with any coffee can a plastic overcap which is intended primarily to protect the coffee product within the package after the main airtight seal has been opened.

A problem has developed, however, in the case of a ground roast coffee can having a vented peel-off lid and a plastic overcap. It has been found that as the gas pressure builds up within the can it tends to dome the flexible lid upwardly and eventually against the overcap. This creates several problems. First, the constant extension of the flexible lid in its domed condition deforms the flexible lid, causing a wrinkled appearance which is unacceptable to the consumer. Additionally, the materials used to seal the vent valve to the lid, including silicon-based oils, would tend to be expelled from the valve opening and onto the surface of the overcap. This causes a visual blemish which is also unacceptable to the consumer. Additionally, if the valve is sufficiently blocked, the gas within the can can cause the can itself to bulge outwardly, which again is unacceptable to the consumer.

While a primary problem has been blockage of the vent valve in the flexible easy-off lid, an additional problem arises in that gases which do escape through the lid may not be able to escape from the space between the lid and the overcap. It is true that the overcap is simply snapped over the chime of the can in a non-airtight manner. However, the surfaces of the overcap which engage the chime of the can, generally along the top and outer periphery of the chime, while not forming a hermetic seal, clearly form a closure

2

which resists escape of any generated gases which might exit from the vent valve into the space between the lid of the can and the overcap.

Thus, a need exists for an improved arrangement for venting gases created within a can wherein the product is packed under atmospheric pressure and is of the type which generates gases sufficiently to cause a pressure buildup, especially when such a can is used in combination with an overcap.

BRIEF SUMMARY OF THE INVENTION

It is a purpose of the present invention to provide a new and improved arrangement for venting gases which build up in a package of the type wherein the product is packaged under atmospheric pressure in a can having a flexible lid with a vent valve and an overcap. More specifically, it is the purpose of the present invention to provide such an improvement for the fresh packaging of ground roast coffee in a can under atmospheric pressure. The term "can" is intended to encompass various types of containers and packages, including the usual cylindrical metallic can as well as rectangular cans, thin metallic cans of any shape and non-metallic cans.

In accordance with the present invention, an arrangement is provided for preventing the vent valve to be closed off by contact with the overcap. This arrangement comprises a spacing structure preferably formed in or on the bottom of the overcap, which prevents the vent valve in the lid from being closed by contact with the plastic overcap. In one preferred embodiment, this is achieved by providing bosses on the lower, internal surface of the overcap which will engage the flexible lid as it moves upwardly so as to limit such upward movement to such a height that the vent valve remains unblocked and the vented gases are permitted to flow therethrough. Preferably the bosses engage the vent valve in such a way as to block its upward movement while not occluding the vent valve opening. The bosses can take many different shapes such as thin ribs, rectangular cross sections and the like.

In another preferred embodiment, the spacing structure may take the form of a pocket formed in the bottom of the overcap and of such a depth that it allows the flexible lid to reach its maximum height caused by the gas buildup without the flexible lid or the vent valve engaging the overcap.

Additionally, the present invention may include a permanently open passageway at the interface between the overcap and the chime of the coffee can which will allow the escape of any built-up gases which have passed through the vent valve into the space between the flexible lid and the overcap.

In a preferred embodiment, this permanently open passageway between the overcap and the chime of the can can be provided by providing some raised bosses on the inside surface of the plastic overcap precisely where it engages the chime of the can. A series of such bosses, arranged side-by-side, would thereby provide a permanently open passageway between the bosses.

Thus, it is an object of the present invention to provide a new and improved arrangement for venting built-up gases in a can containing a product which generates gases and which can include a flexible lid and an overcap.

It is another object of the present invention to provide a new and improved arrangement for venting gases from a can of the type described which includes a structure for preventing blockage of a vent valve in the flexible lid.

It is still another object of the present invention to provide an improved venting arrangement in a package of the type described which includes a structure for forming a perma-

US 7,074,443 B2

3

nently open passageway between the interface of the overcap and the chime of the coffee can.

These and other objects of the present invention will become apparent from the detailed description of the preferred embodiments.

BRIEF DESCRIPTION OF THE DRAWINGS

Preferred embodiments of the present invention are illustrated in the accompanying drawings, wherein:

FIG. 1 is a cross sectional view through a prior art package illustrating the problem solved by the present invention;

FIG. 2 is a plan view of the vent valve on the flexible lid of FIG. 1;

FIG. 3 is a greatly enlarged cross sectional view of a vent valve of FIGS. 1 and 2, taken along line 3—3 of FIG. 2;

FIG. 4 is a cross sectional view through a package, similar to FIG. 1, but showing the features of the present invention;

FIG. 5 is a top plan view of the overcap of FIG. 4;

FIG. 6 is a partial cross sectional view taken along line 6—6 of FIG. 5;

FIG. 7 is a partial cross sectional view taken along line 7—7 of FIG. 5;

FIG. 8 is a partial plan view of an overcap similar to FIG. 5 but showing a modification of the present invention;

FIG. 9 is a cross sectional view through a package, similar to FIG. 4, but showing a modification of the present invention;

FIG. 10 is a partial plan view of the overcap of FIG. 9;

FIG. 11 is a partial cross sectional view taken along line 11—11 of FIG. 5; and

FIG. 12 is an enlarged view of the upper right-hand portion of FIG. 4, more clearly illustrating certain features of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring now to the drawings, like elements are represented by like numerals throughout the several views.

FIG. 1 illustrates a conventional can 10 which packages a product 11, for example ground roast coffee, under atmospheric pressure. The normal condition of the can is shown in solid lines. The top of the can is sealed by a flexible peel-off lid 12 formed of a flexible foil material, which lid is hermetically sealed around its periphery to a ledge 14 which is integral with the can 10. In a manner known per se, the easy peel-off lid 12 has a pull tab 15. When a product such as ground roasted coffee is packaged at atmospheric conditions, the carbon dioxide which is naturally given off by the product will cause a gaseous buildup within the interior of the can 10. It is therefore necessary to provide a vent in the form of a vent valve 16 which will permit the built-up carbon dioxide to escape to the space above the flexible lid 12.

A conventional can includes a chime 13 with inner edge 13a and a plastic overcap 20. The overcap engages the chime at contact lines 21 and 22. While these contact lines are not intended to provide a hermetic seal, they do to some extent restrict the flow of gas. The primary purpose of the overcap is to provide some protection for the product after the lid 12 has been removed. The overcap 20 also includes a lower part 23 which hangs below the chime and is not in contact with it.

The can 10 may be of any suitable material such as metal, plastic, composite materials, cardboard or other suitable

4

materials. Between the time that a can such as that shown in FIG. 1 is initially sealed, until the time that the consumer removes the lid 12, carbon dioxide is being generated within the hermetically sealed interior of the can. Initially, as the carbon dioxide tries to escape through the vent valve 16, the resistance offered by the vent valve 16 would be greater than the resistance offered to upward bending of the flexible lid 12. Eventually, the condition is reached as shown in dotted lines in FIG. 1 whereat the flexible lid 12 has been moved up to a domed position 12' and the vent valve 16 has been moved up against the bottom of the overcap 20 as shown at 16'. At this point, the downward force of the overcap would tend to close off the vent valve 16. This presents two problems. First, the lid 12 will remain in the domed position 12' and thus become deformed, causing a wrinkled appearance which is not acceptable to the consumer. Second, if the vent valve 16 includes a silicone-based oil, such oil will be expelled from the valve and onto the overcap 20. This causes a stain which tends to spread, causing a visual blemish. Additionally, in the case of rectangular cans, thin metallic cans of any shape, and non-metallic cans, a further buildup could cause the sides of the can 10 to bulge outwardly, as represented by dotted lines 10'. Such a bulged out can is also unacceptable to the consumer.

The vent valve is a commercial product made by Plitek, LLC. Referring to FIG. 2, the vent valve is divided into two outer portions 50 which are completely adhered to the top of lid 12 and a central portion 51 which includes a channel therein for the flow of the built-up gases out both ends of the channel, as shown by the arrows in FIG. 2.

The valve 16 is shown in greater detail in FIG. 3. The flexible lid 12 would preferably have openings formed therein in the form of slits 52 of a type as shown in FIG. 14 of the Bolton U.S. Pat. No. 5,688,544. The width of the slits is highly exaggerated in greatly enlarged FIG. 3. In practice, there could be approximately seven small slits, all located in the central portion of the vent valve 16. FIG. 2 illustrates a plurality of slit openings in the lid 12 within a central area designated at 60. Referring to FIG. 3, the vent valve 16 includes an upper membrane 53 of metallic polyethylene terephthalate (PET). Below the membrane 53 is a polyethylene terephthalate valve flap 57 which is adhered by synthetic rubber adhesive 54 to a natural PET base 56 which is in turn adhered to the flexible lid 12 by a pressure sensitive adhesive 56. The inner space between the valve flap 57 and the flexible lid 12 just above the slits 52 is filled with a silicone-based oil with graphite suspension. In practice, gas escaping through the flexible lid 12 will flow through an opening in the valve flap 57 and then outwardly through the ends of central portion 51 between the valve flap 57 and the membrane 53. The portions 50 and 51 are indicated by vertical dotted lines in FIG. 3.

Solutions to the problem described above are illustrated in FIGS. 4—12.

Referring to FIGS. 4—7, there is provided an overcap 30. A vent valve 16 of the type described in FIGS. 2 and 3 is superimposed in dotted lines on FIG. 5. Formed on the underside of the overcap 30 (and referring also to FIGS. 6 and 7, there are provided a plurality of thin rib bosses 31, 32 and 33. Referring to FIGS. 4 and 5, a highly domed position of the lid 12, the vent valve 16 will engage the thin rib bosses 31, 32 and 33, thus keeping the vent valve 16 spaced beneath the actual undersurface of the overcap 30. By providing three bosses 31, 32 and 33, and by placing them at 120° from each other around the center of the overcap, it is assured that at any given rotational position, while one of the thin ribs might well engage and prevent gas from flowing through

US 7,074,443 B2

5

one end of the central channel portion 51, the other end thereof will always be unobstructed for the flow of the escaping built-up gases.

The rib bosses 31-33 are all identical, and one of them is shown in detail in FIGS. 6 and 7. In a preferred embodiment, each rib boss would have a thickness of approximately 0.01 inches, a height of 0.04 inches and a width at its bottom of approximately 0.01 inches.

FIG. 8 illustrates a modification of the present invention. In this case, there is provided an overcap 40 which differs from the overcap 30 in that the thin rib bosses 31, 32 and 33 have been replaced by square cross section bosses as shown at 41, 42 and 43 in FIG. 8. These could for example have a side dimension of 0.06 inches and a depth, the same as in FIGS. 4-7, of approximately 0.04 inches. The bosses may also have other polygonal or round shapes. Referring to FIG. 8, it is noted that the three bosses 41, 42 and 43 are arranged in a triangular pattern, equiangularly about the axis of the overcap 40. Here, the vent valve 16 is turned relative to its orientation in FIGS. 4 and 5. However, owing to the arrangement of the bosses 41, 42 and 43, even though one of them, in this case 43, engages the central portion 51, the other two bosses 41 and 42 are so situated as to permit gas to flow out through the other end of central portion 51.

In the package of FIG. 4, the flexible lid 12, upon original sealing of the can, would be in the downwardly curved position as shown in solid lines in FIG. 1. However, FIG. 4 is intended to illustrate in solid lines only the position when the carbon dioxide has caused sufficient upward movement of the flexible lid 12 to the height whereat the vent valve 16 has engaged the bosses 31, 32 and 33.

FIGS. 9 and 10 illustrate another embodiment of the present invention. In this embodiment, an overcap 45 includes a pocket 46 which is sufficiently deep that the vent valve 16, even in its uppermost domed position, will never engage the bottom of pocket 46 and hence will not engage the bottom of overcap 45. The location and depth of pocket 46 must be selected so that in the uppermost position of the lid 12 and valve 16, there is an open passageway through the vent valve 16, below the edges of the pocket 46 and out toward the periphery of the can. The pocket would preferably have a height of between $\frac{1}{8}$ and $\frac{1}{4}$ inch.

As noted above, the contact lines 21 and 22 between the chime of the can and the interior of the overcap 30, 40, 45, while not forming a hermetic seal, do offer some resistance to the flow of gases. Referring to FIGS. 11 and 12, with the vent valve 16 unblocked (by the use of bosses 31-33 or 41-43, or pocket 46), permitting free flow of the carbon dioxide out of the can and into the space between the flexible lid 12 and the overcap 30, 40, 45, it is possible that the gases can build up to a pressure sufficient to pass beyond contact lines 21 and 22. However, in order to facilitate the flow of gases out of the space between the overcap 30, 40, 45 and the lid 12, the present invention further includes providing a permanently opened passageway from this inner space to the surrounding exterior. For this purpose, raised elongated bosses 35 and 36 are provided on the top and side of the interior of the overcap 30, 40, 45 where the overcap engages the chime 13 at contact lines 21 and 22. Gases entering this inner space between lid 12 and overcap 30, 40, 45 now have a permanently opened passageway for flowing out of this space. This flow from the vent valve 16 up and around the chime 13 is shown by arrows at the upper right hand portion of FIG. 2 and by arrows A in FIG. 7.

Although the invention has been described in considerable detail, it will be apparent that the invention is capable

6

of numerous modifications and variations, apparent to those skilled in the art, without departing from the spirit and scope of the invention.

What is claimed is:

1. A can containing a food product which creates a gas buildup, the top of the can comprising a flexible lid having a vent valve to vent built-up gases, an overcap covering the lid and engaging the sides of the can around the periphery thereof, the overcap including a spacing structure inward from an inner edge of the periphery which prevents the vent valve from being blocked by the overcap when the lid is pushed toward the overcap by gases built-up within the can.

2. A can according to claim 1, said spacing structure comprising a plurality of bosses on the overcap positioned to be engaged by the flexible lid to block further upward movement thereof, and to allow gases passing through the vent valve to flow toward the periphery of the can.

3. A can according to claim 2, wherein the bosses are positioned to engage the vent valve without occluding gas flow therethrough.

4. A can according to claim 3, wherein there are three bosses which are arranged equiangularly about the center of the overcap.

5. A can according to claim 4, wherein the bosses, viewed in plan view, are thin ribs extending along radii of the overcap.

6. A can according to claim 4, wherein the bosses are, in plan view, rectangular.

7. A can according to claim 1, wherein the spacing structure comprises a pocket formed in the bottom of the overcap which is of sufficient depth to allow the flexible lid to reach a maximum height of the lid caused by the gas buildup without the flexible lid or the vent valve engaging the overcap.

8. A can according to claim 1, wherein the product is ground roast coffee.

9. A can according to claim 1, including a permanently opened passageway from the space between the lid and overcap around the top rim of the can to the exterior.

10. A can according to claim 9, said passageway being formed between raised bosses formed in the overcap where the overcap engages the top rim of the can.

11. A can according to claim 1, wherein the lid does not contact the overcap to block the valve from opening when gases build up within the can.

12. The can of claim 1, wherein the flexible lid is a peelable lid.

13. The can of claim 1, wherein the flexible lid comprises flexible foil.

14. A can containing a food product which creates a gas buildup, the top of the can comprising a flexible lid having a vent valve to vent built-up gases and a chime around the periphery of the top, an overcap covering the lid, and a lower portion extending down along the sides of the can and engaging the sides of the can around the periphery thereof, and including a permanently opened passageway from the space between the lid and the overcap to the exterior, said passageway extending over the chime and down inside the lower portion of the overcap to empty out along the side of the can, said passageway being formed between raised bosses formed in the overcap which engage the top rim of the can.

15. A can containing roast ground coffee packed at atmospheric pressure and generating a carbon dioxide gas buildup,

US 7,074,443 B2

7

a flexible lid hermetically sealing the top of the can and including a vent valve allowing the escape of built-up carbon dioxide, and

an overcap covering the top of the can and engaging the can around the upper rim thereof, the overcap including a spacing structure inward from an inner edge of the rim which prevents the vent valve from being blocked by the overcap when the lid is pushed up toward the overcap by the pressure of the built-up carbon dioxide.

16. A can according to claim 15, said spacing structure comprising a plurality of bosses on the overcap positioned to be engaged by the flexible lid to block further upward movement thereof, and to allow gases passing through the vent valve to flow toward the periphery of the can.

17. A can according to claim 16, wherein the bosses are positioned to engage the vent valve without occluding the flow of carbon dioxide therethrough.

18. A can according to claim 17, wherein there are three bosses which are arranged equiangularly about the center of the overcap.

19. A can according to claim 18, wherein the bosses, viewed in plan view, are thin ribs extending along the radii of the overcap.

20. A can according to claim 18, wherein the bosses are, in plan view, rectangular.

21. A can according to claim 15, wherein the spacing structure comprises a pocket formed in the bottom of the

8

overcap which is of sufficient depth to allow the flexible lid to reach a maximum height of the lid as caused by the carbon dioxide buildup without the flexible lid or the vent valve engaging the overcap.

22. A can according to claim 15, including a permanently opened passageway from the space between the lid and overcap around the top rim of the can to the exterior.

23. A can containing a food product which creates a gas buildup, the top of the can comprising a flexible lid having a vent valve to vent built-up gases, an overcap covering the lid and engaging the sides of the can around the periphery thereof, the overcap including a spacing structure which prevents the vent valve from being blocked by the overcap when the lid is pushed toward the overcap by gases built-up within the can, said spacing structure being positioned such that said spacing structure is not engaged by the valve when the lid is pushed toward the overcap by the gases built-up within the can.

24. A can according to claim 23, wherein the spacing structure is circular.

25. A can according to claim 23, wherein the product is ground roast coffee.

* * * * *

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

KRAFT FOODS HOLDINGS, INC.,

Plaintiff,

v.

THE PROCTER & GAMBLE COMPANY,

Defendant

Case No. 07C0613S

**ANSWER, COUNTERCLAIMS, AND
THIRD-PARTY COMPLAINT OF THE
PROCTER & GAMBLE COMPANY;**

DEMAND FOR JURY TRIAL

THE PROCTER & GAMBLE COMPANY,

Counterclaim Plaintiff

v.

KRAFT FOODS HOLDINGS, INC.

Counterclaim Defendant

and

KRAFT FOODS GLOBAL, INC.

Third-Party Defendant

Defendant and Counterclaim Plaintiff, The Procter & Gamble Company ("P&G"), answers the Complaint of Plaintiff Kraft Foods Holdings, Inc. ("KFH") and asserts its Counterclaim and Third-Party Claim against KFH and Third-Party Defendant Kraft Foods Global, Inc. ("KFG"), as follows:

THE PARTIES

1. P&G admits that KFH is a Delaware Corporation and that it has a principal place of business in Northfield, Illinois. P&G otherwise denies the allegations of paragraph 1.

2. Admitted.

JURISDICTION AND VENUE

3. P&G admits that Plaintiffs purports to allege a cause of action under the patent laws of the United States. P&G admits that Plaintiffs purports to invoke subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a). P&G admits that it is subject to personal jurisdiction in this Court with respect to the claims asserted in the Complaint. P&G denies the remaining allegations of paragraph 3, including that it has committed any acts of infringement.

4. P&G also admits that venue exists in this judicial district under 28 U.S.C. 1331, 1391(b), (c), and 1400(b). P&G denies the remaining allegations in paragraph 4 of the Complaint.

ALLEGED INFRINGEMENT OF U.S. PATENT NO. 7,074,443

5. P&G admits that U.S. Patent No. 7,074,443 (the “’443 Patent”), entitled “Vented Can Overcap,” issued on July 11, 2006. P&G further admits that the face of the ’443 Patent lists KFH as the “Assignee.” P&G is without knowledge or information sufficient to form a belief as to the truth of KFH’s allegation that it owns the patent. P&G denies the remaining allegations of paragraph 5 of the Complaint.

6. P&G denies the allegations of paragraph 6 of the Complaint.
7. P&G denies the allegations of paragraph 7 of the Complaint.
8. P&G denies the allegations of paragraph 8 of the Complaint.

RESPONSE TO PRAYER FOR RELIEF

P&G denies that Plaintiffs are entitled to any of the relief they have requested.

FIRST AFFIRMATIVE DEFENSE

(Invalidity)

Each claim of the ’443 Patent is invalid and/or unenforceable for failure to comply with the requirements of patentability stated in Title 35, United States Code, and particularly the requirements of one or more of 35 U.S.C. §§ 101, 102, 103, and 112.

SECOND AFFIRMATIVE DEFENSE

(Non-Infringement of the '443 Patent)

P&G has not infringed, and currently does not infringe any valid claim of the '443 Patent directly, indirectly, contributorily, by inducement, under the doctrine of equivalents, or in any other manner.

THIRD AFFIRMATIVE DEFENSE

(Prosecution history estoppel)

Plaintiffs are estopped by the doctrine of prosecution history estoppel from asserting infringement under the doctrine of equivalents for one or more of asserted claims.

FOURTH AFFIRMATIVE DEFENSE

(Marking)

Plaintiffs and/or their licensees have failed to mark articles patented under the '443 Patent in a manner sufficient to give notice under 35 U.S.C. Section 287 thereby barring any recovery of damages for the period before Plaintiffs commenced this action.

PRAYER FOR RELIEF ON KFH'S COMPLAINT

WHEREFORE, P&G prays that Plaintiffs take nothing by their Complaint, and that P&G be awarded judgment in this action, costs of suit incurred herein, and such other relief as the Court deems just and proper.

COUNTERCLAIMS

For its counterclaims and third-party claim against KFH and KFG, P&G alleges as follows:

THE PARTIES

1. P&G is an Ohio corporation with its principal place of business in Cincinnati, Ohio.
2. KFH is a Delaware corporation with a principal place of business in Northfield, Illinois.

3. KFG is a Delaware corporation with a principal place of business in Northfield, Illinois.

4. On information and belief, KFG is a wholly-owned subsidiary of Kraft Foods Inc., a Virginia Corporation, which is engaged, through its subsidiaries, in the manufacture and sale of packaged foods and beverages in the United States, including Maxwell House brand ground, roast coffee in 39-ounce plastic containers. On information and belief, KFH is a wholly-owned subsidiary of KFG.

5. KFH is the assignee of record of the '443 Patent, issued to Jeffrey A. Thomas, Jeffrey Alan Zimmermann, Prias DeCleur, and Mete Bruncaj ("Assignors"). On information and belief, the Assignors, working either directly or indirectly for KFH in collaboration with members of the Global Technology & Quality Group of Kraft Foods Inc., designed and made plastic containers for ground, roast coffee beginning in about 2002 and assigned the rights to those designs to KFH. On information and belief, KFH licensed KFG to manufacture, distribute, offer for sale and sell Maxwell House brand coffee sold in 39-ounce containers using technology developed for KFH by the Assignors. On information and belief, KFG manufactures, markets, and sells Maxwell House brand coffee in 39-ounce plastic containers designed, developed, and made by the Assignors and licensed to KFG by KFH.

JURISDICTION AND VENUE

6. Paragraphs 1 through 5 are incorporated herein by reference.

7. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a) because this action arises under the patent laws of the United States, including 35 U.S.C. § 271 *et seq.* The Court additionally has jurisdiction over P&G's counterclaims because they arise under the Declaratory Judgment Act, 28 U.S.C. §§ 2201, 2202 and 28 U.S.C. § 1338(a). There is a justiciable controversy concerning the validity, enforceability, and infringement of the '443 Patent, which Plaintiffs allege is being infringed and causing irreparable harm to their business.

8. The Court has personal jurisdiction over KFH and KFG based on their filing of this lawsuit. The Court also has personal jurisdiction over KFH and KFG because they have systematic and continuous contacts with the State of Wisconsin and with this judicial district such that the exercise of jurisdiction over them does not offend traditional notions of fair play and substantial justice. On information and belief, KFH licenses KFG to sell and/or distribute infringing products in this district and KFG sells and/or distributes infringing products in this district.

9. Venue with respect to KFH and KFG is proper in this district pursuant to 28 U.S.C. §§ 1331, 1391(b), (c) and 1400(b).

COUNT I

(Declaratory Relief of Invalidity of '443 Patent Against Kraft Foods Holding, Inc. and Kraft Foods Global, Inc.)

10. Paragraphs 1 through 9 are incorporated herein by reference.

11. An actual controversy exists between P&G and KFH and KFG as a result of KFH and KFG's assertion in the Complaint that they own the '443 Patent, that P&G allegedly infringes this patent, and that the alleged infringement is causing irreparable harm to their business.

12. On information and belief, the asserted claims of the '443 Patent are invalid for failure to comply with the requirements of patentability stated in Title 35, United States Code, and particularly one or more of the requirements of 35 U.S.C. §§ 101, 102, 103, and 112.

13. The claims of the '443 Patent are based on an application filing date identified by the patent as November 19, 2002. On information and belief, one or more of the claimed inventions of the '443 Patent are invalid under 35 U.S.C. § 102(g) based on prior invention by P&G's inventors, including P&G inventors who were awarded United States Patent 7,169,419 ("the '419 Patent"), entitled "Packaging System To Provide Fresh Packed Coffee." A true and correct copy of the '419 Patent is attached hereto as Exhibit A. On information and belief, P&G's inventors made one or more of the inventions claimed in the '443 Patent in this country

and did not abandon, suppress, or conceal the inventions. Based on the assertion of infringement by KFH and KFG, the '419 Patent discloses one or more of the inventions claimed in the '443 Patent.

COUNT II

(Declaratory Relief of Non-Infringement Against Kraft Foods Holding, Inc. and Kraft Foods Global, Inc.)

14. Paragraphs 1 through 13 are incorporated herein by reference.

15. KFH and KFG assert in their Complaint that P&G infringes the '443 Patent.

P&G does not infringe and has not infringed any valid claims of the '443 Patent.

COUNT III

(Infringement of U.S. Patent No. 7,169,419 By Kraft Foods Holding, Inc. and Kraft Foods Global, Inc.)

16. Paragraphs 1 through 15 are incorporated herein by reference.

17. On January 30, 2007, the United States Patent & Trademark Office ("USPTO") duly and legally issued the '419 Patent to inventors David Dalton, Kerry Weaver and Thomas Manske, Jr. These inventors have assigned all rights and interest in the '419 Patent to P&G. KFG has infringed and continues to infringe the '419 Patent. The infringing acts include at least manufacturing, using, selling, and/or offering to sell 39-ounce plastic containers of Maxwell House brand coffee. KFG is liable for infringement of the '419 Patent pursuant to 35 U.S.C. § 271.

18. KFG's acts of infringement have caused and are causing damage to P&G. P&G is entitled to recover from KFG the damages sustained by P&G as a result of KFG's infringement in an amount to be proven at trial. KFG's infringement of P&G's rights under the '419 Patent also is causing, and will continue to cause, irreparable harm to P&G, for which there is no adequate remedy at law, unless KFG is enjoined by this Court.

19. Upon information and belief, KFG's infringement of the '419 Patent is willful and deliberate, entitling P&G to increased damages under 35 U.S.C. § 284 and attorney fees incurred in prosecuting this action under 35 U.S.C. § 285.

20. On information and belief, KFG is the alter ego of KFH and they are jointly and severally liable for directly infringing the '419 Patent. On information and belief, KFH is a wholly-owned subsidiary of KFG and has substantially the same management and ownership, is commonly controlled by that management and ownership, and shares substantially the same business purpose with respect to the procurement of infringing technology for storing ground, roast coffee in plastic containers, the defense of litigation relating to this infringement, and the assertion of patent infringement claims relating to this technology. On information and belief, KFH and KFG do not maintain corporate formalities with respect to their development and procurement of technology and intellectual property and the conduct of litigation regarding to intellectual property relating to plastic containers used for storing ground, roast coffee. KFH pursues this lawsuit as "KRAFT FOODS GLOBAL, INC.," as indicated on page 3 of its Complaint. KFH also considers itself synonymous with "Plaintiff Kraft Foods Global, Inc.," as it states in its Corporate Disclosure Statement. In identifying the parent corporation of the plaintiff, Kraft Foods Global, the Corporate Disclosure Statement states that "Kraft Foods Global, Inc. is a wholly owned subsidiary of Kraft Foods, Inc., a publicly traded company." Any attempt by KFG and KFH to rely on the fiction of being separate corporate entities would be inequitable in that it could allow KFH to accuse P&G as an alleged infringer in a litigation in which it may avoid having to answer for its own infringement of P&G's related '419 Patent on preexisting technology.

21. On information and belief, KFH, during the process of developing technology described in its patents relating to the storing of ground, roast coffee in plastic containers, including the '443 Patent, has infringed the '419 Patent by making or using one or more of the claimed inventions of the '419 Patent.

22. On information and belief, KFH, with knowledge of the '419 Patent, actively induced and encouraged KFG's infringement of the '419 patent by licensing KFG to use technology that infringes the '419 Patent by making, selling, and offering to sell ground, roast coffee in plastic containers that infringe the '419 Patent, and by making designs and information for practicing that technology available to KFG.

23. On information and belief, KFH's infringement of the '419 Patent is willful and deliberate, entitling P&G to increased damages under 35 U.S.C. § 284 and attorney fees incurred in prosecuting this action under 35 U.S.C. § 285.

PRAYER FOR RELIEF AS TO COUNTS I-III

WHEREFORE, P&G prays for judgment and seeks relief against KFH and KFG as follows:

(a) That the Court determine and declare that one or more of the claims of the '443 Patent is invalid;

(c) That the Court determine and declare that the claims of the '443 Patent are not infringed by P&G;

(b) For preliminary and permanent injunctions enjoining the aforesaid acts of infringement by KFH and KFG, and their officers, agents, servants, employees, subsidiaries and attorneys, and those persons acting in concert with KFH and KFG, including related individuals and entities, customers, representatives, dealers, and distributors;

(c) For an award of actual damages against KFH and KFG;

(d) For an award of pre-judgment and post-judgment interest, according to proof against KFH and KFG,

(e) For an award of enhanced damages pursuant to 35 U.S.C. § 284 against KFH and KFG;

(f) For an award of attorney fees pursuant to 35 U.S.C. § 285 or as otherwise permitted by law against KFH and KFG;

(g) For all costs of suit against KFH and KFG; and

(h) For such other and further relief as the Court may deem just and proper.

DATED: 31 October 2007 Respectfully submitted,

By

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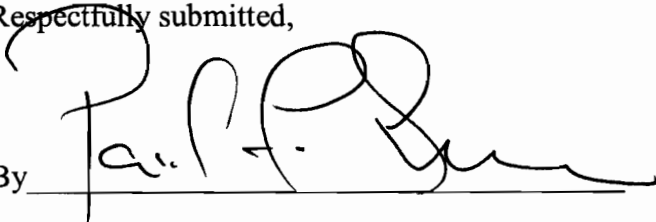
JURY DEMAND

P&G demands a jury trial on all issues that are triable by right to a jury.

DATED: 31 October 2007

Respectfully submitted,

By


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US007169419B2

(12) **United States Patent**
Dalton et al.

(10) **Patent No.:** **US 7,169,419 B2**
(45) **Date of Patent:** ***Jan. 30, 2007**

(54) **PACKAGING SYSTEM TO PROVIDE FRESH
PACKED COFFEE**

(75) Inventors: **David Andrew Dalton**, Loveland, OH (US); **Kerry Lloyd Weaver**, Florence, KY (US); **Thomas James Manske, Jr.**, Mason, OH (US)

(73) Assignee: **The Procter and Gamble Company**, Cincinnati, OH (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 19 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **10/726,309**

(22) Filed: **Dec. 2, 2003**

(65) **Prior Publication Data**

US 2004/0137110 A1 Jul. 15, 2004

Related U.S. Application Data

(63) Continuation-in-part of application No. 10/155,338, filed on May 24, 2002.

(60) Provisional application No. 60/295,666, filed on Jun. 4, 2001.

(51) Int. Cl.
B65D 83/00 (2006.01)
B65D 85/00 (2006.01)

(52) U.S. Cl. **426/110; 426/118; 426/127**

(58) Field of Classification Search **426/110, 426/118, 127, 126, 395, 396, 398; 220/495.03, 220/227, 366.1**

See application file for complete search history.

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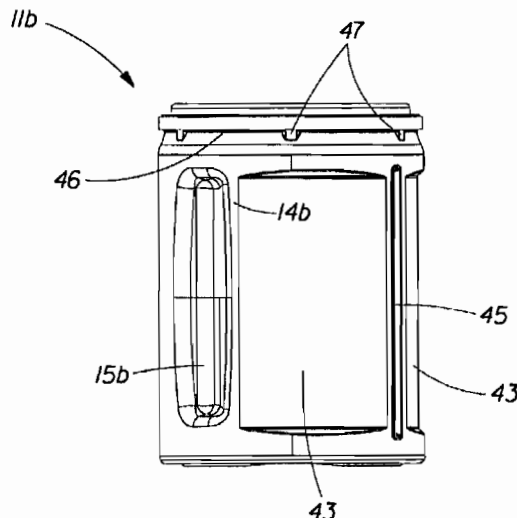
Primary Examiner—Arthur L. Corbin

(74) Attorney, Agent, or Firm—Ingrid N. Hackett; Carl J. Roof; Peter D. Meyer

(57) **ABSTRACT**

A packaging system useful for roast and ground coffee, having a container with a closed bottom, an open top, and a body enclosing a perimeter between the bottom and the top. An annular protuberance is disposed upon the body and is continuously disposed around the perimeter of the body proximate to the top. The protuberance forms a surface external to the body. The surface is substantially perpendicular to the longitudinal axis of the container. A flexible closure is removeably attached and sealed to the protuberance so that the closure seals the interior volume of the container.

18 Claims, 10 Drawing Sheets



EXHIBIT

A

U.S. Patent

Jan. 30, 2007

Sheet 1 of 10

US 7,169,419 B2

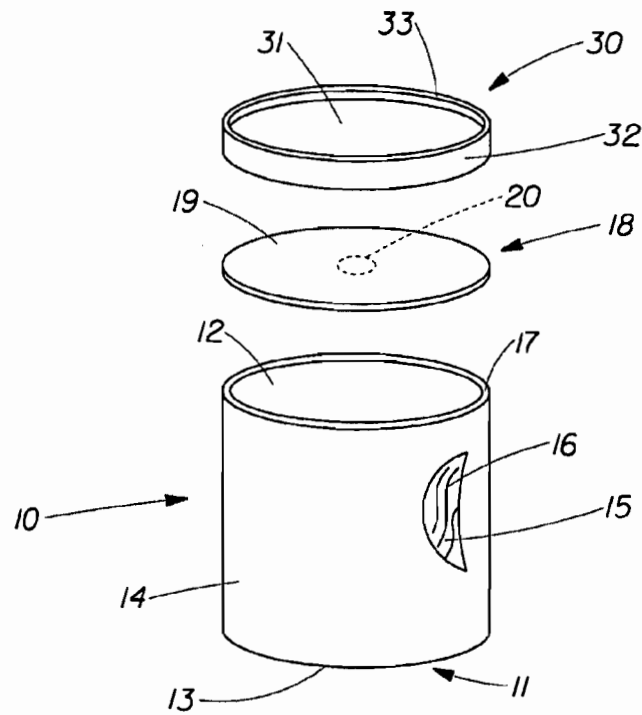


Fig. 1

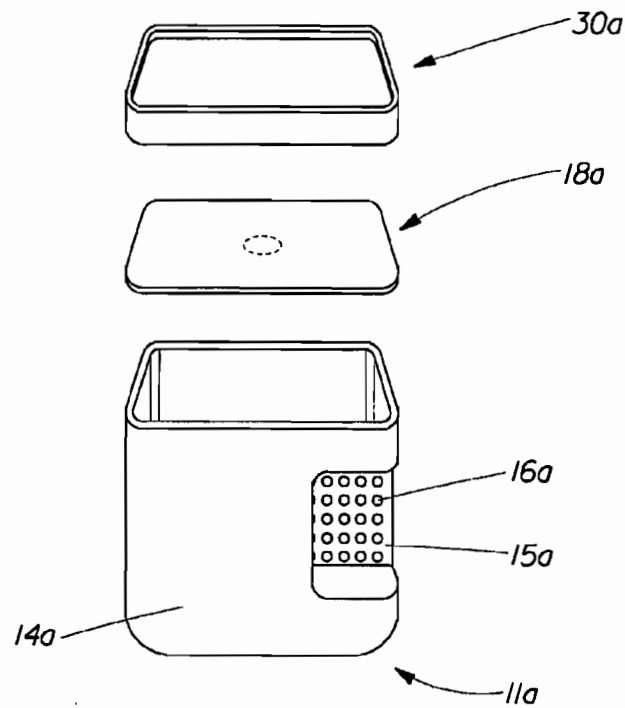


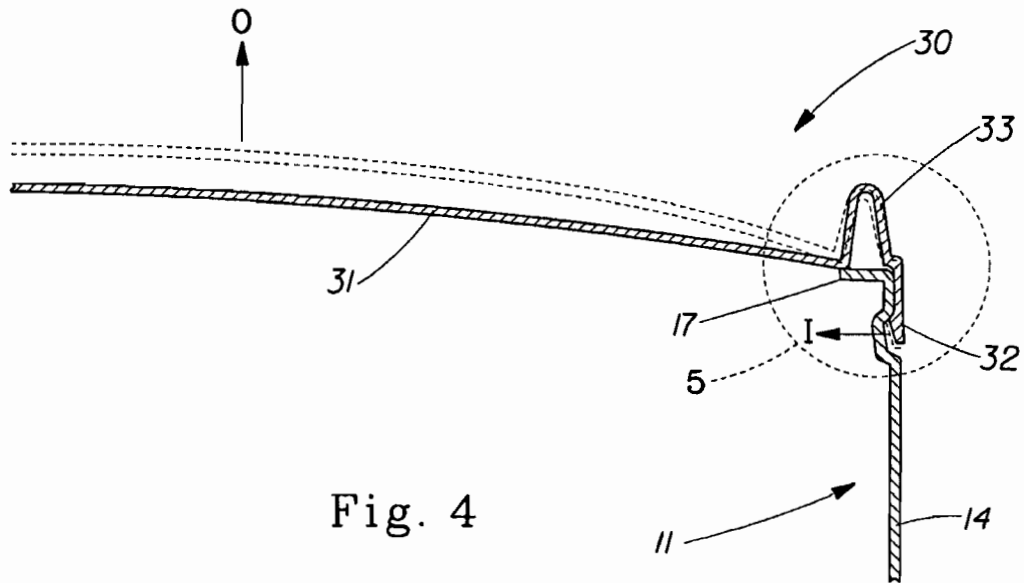
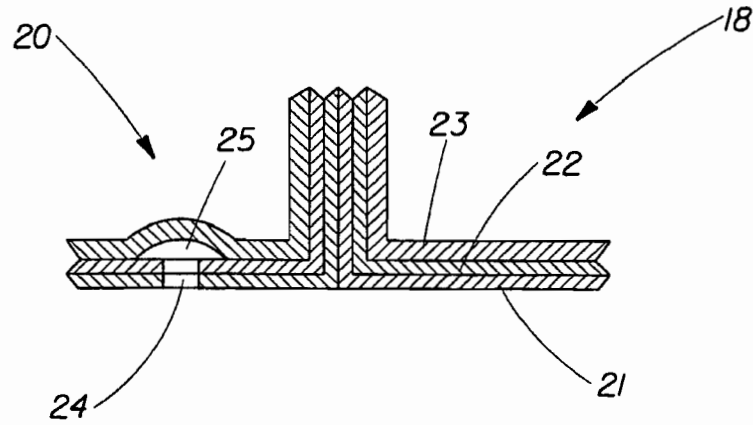
Fig. 2

U.S. Patent

Jan. 30, 2007

Sheet 2 of 10

US 7,169,419 B2



U.S. Patent

Jan. 30, 2007

Sheet 3 of 10

US 7,169,419 B2

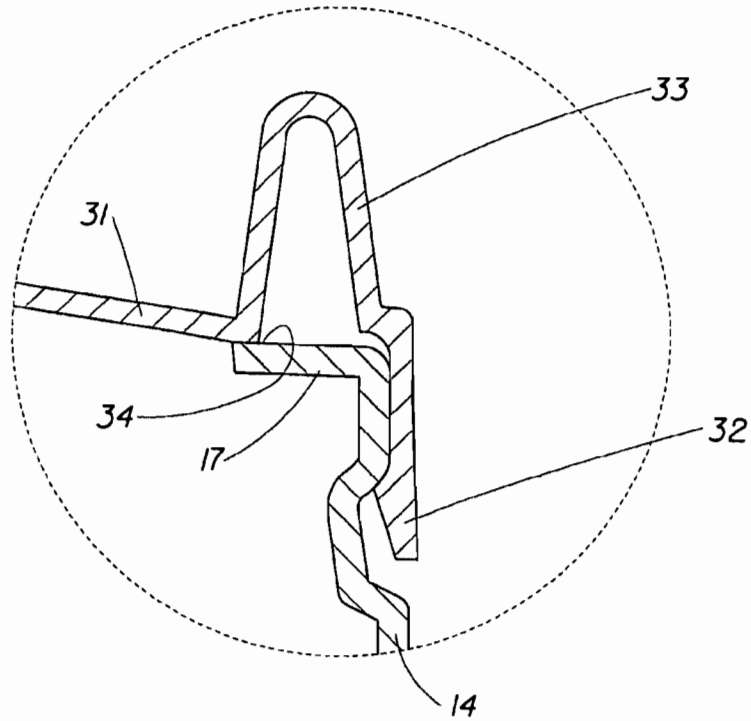


Fig. 5

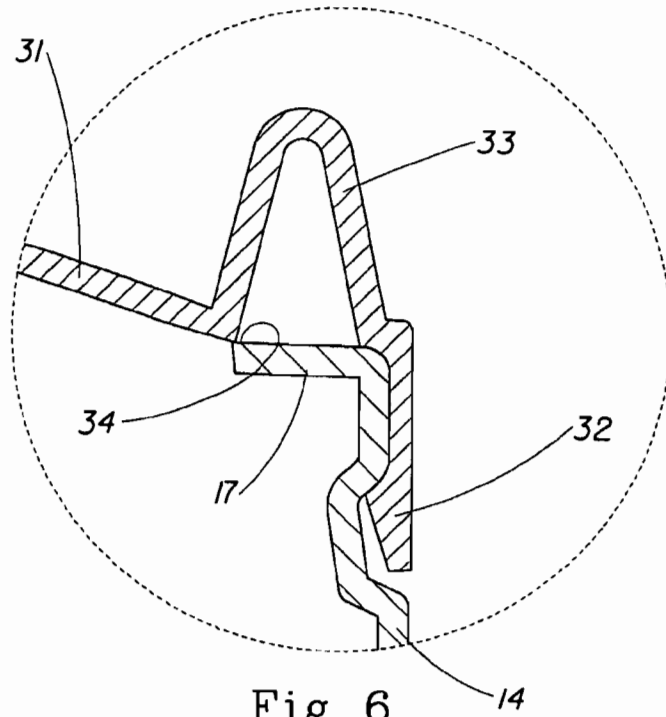


Fig. 6

U.S. Patent

Jan. 30, 2007

Sheet 4 of 10

US 7,169,419 B2

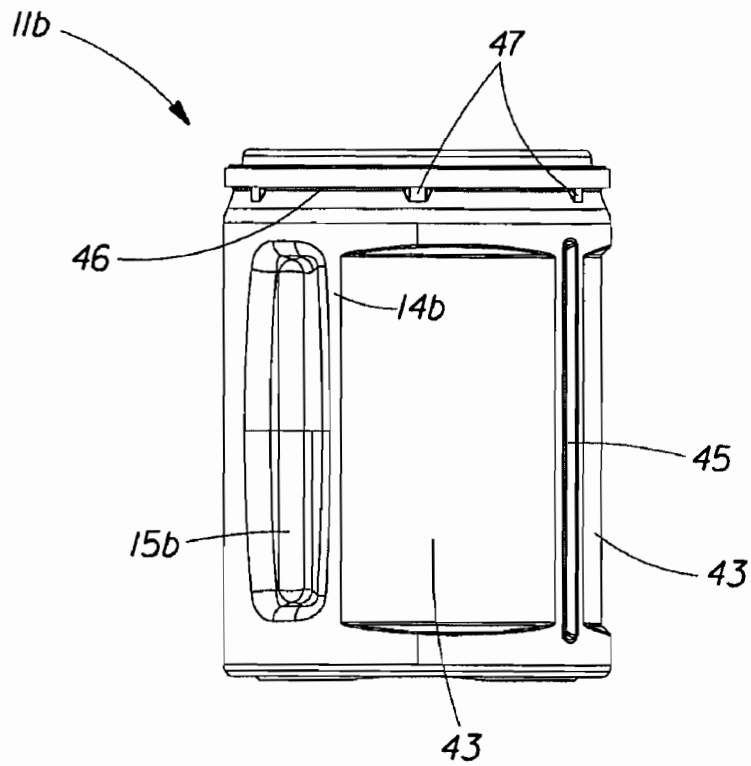


Fig. 7

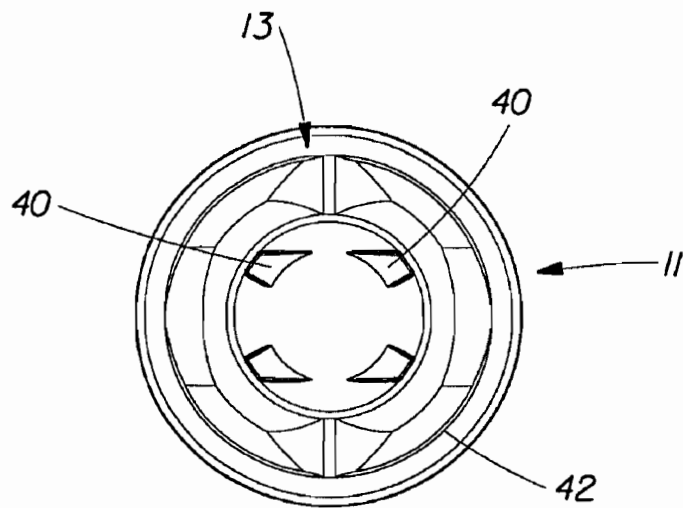


Fig. 7A

U.S. Patent

Jan. 30, 2007

Sheet 5 of 10

US 7,169,419 B2

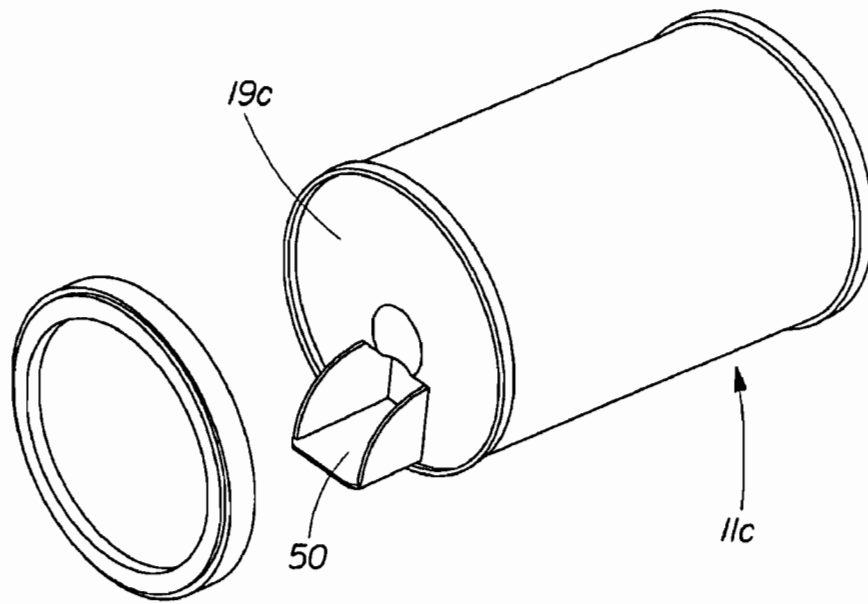


Fig. 8

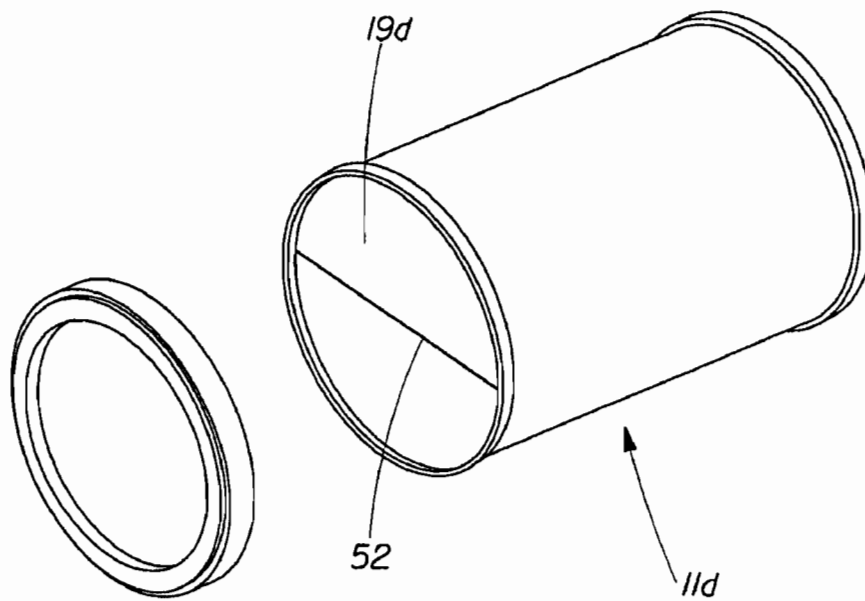


Fig. 8A

U.S. Patent

Jan. 30, 2007

Sheet 6 of 10

US 7,169,419 B2

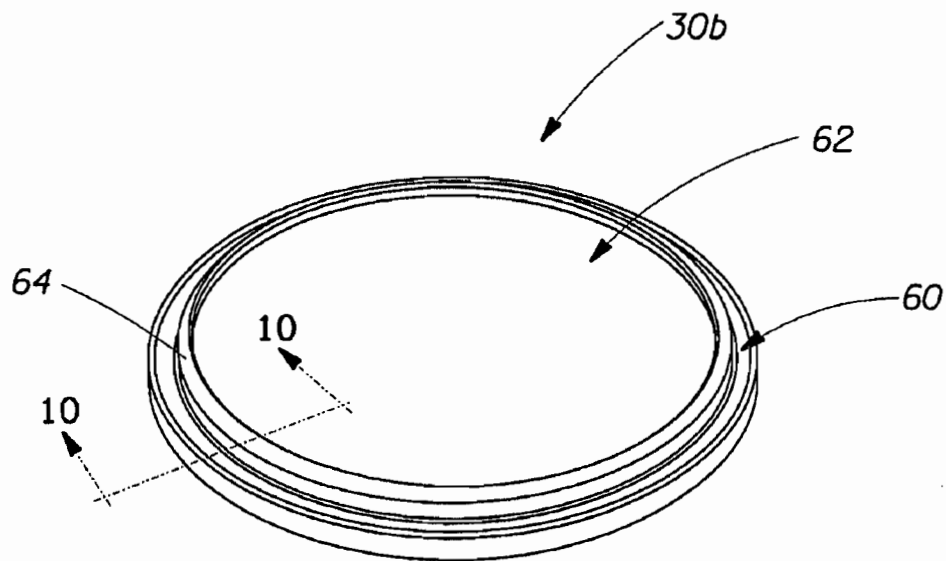


Fig. 9

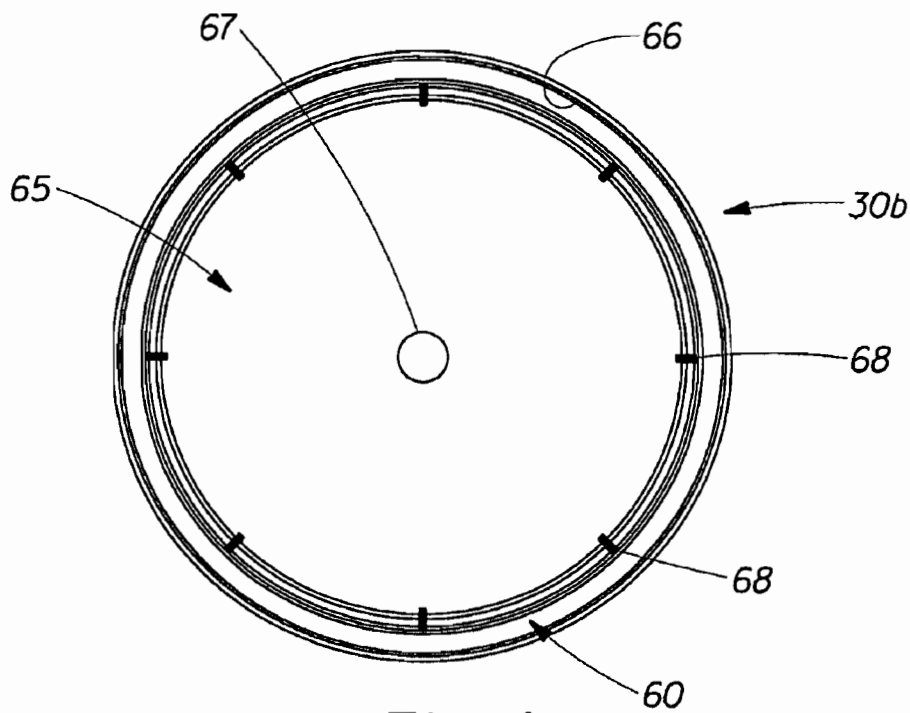


Fig. 9A

U.S. Patent

Jan. 30, 2007

Sheet 7 of 10

US 7,169,419 B2

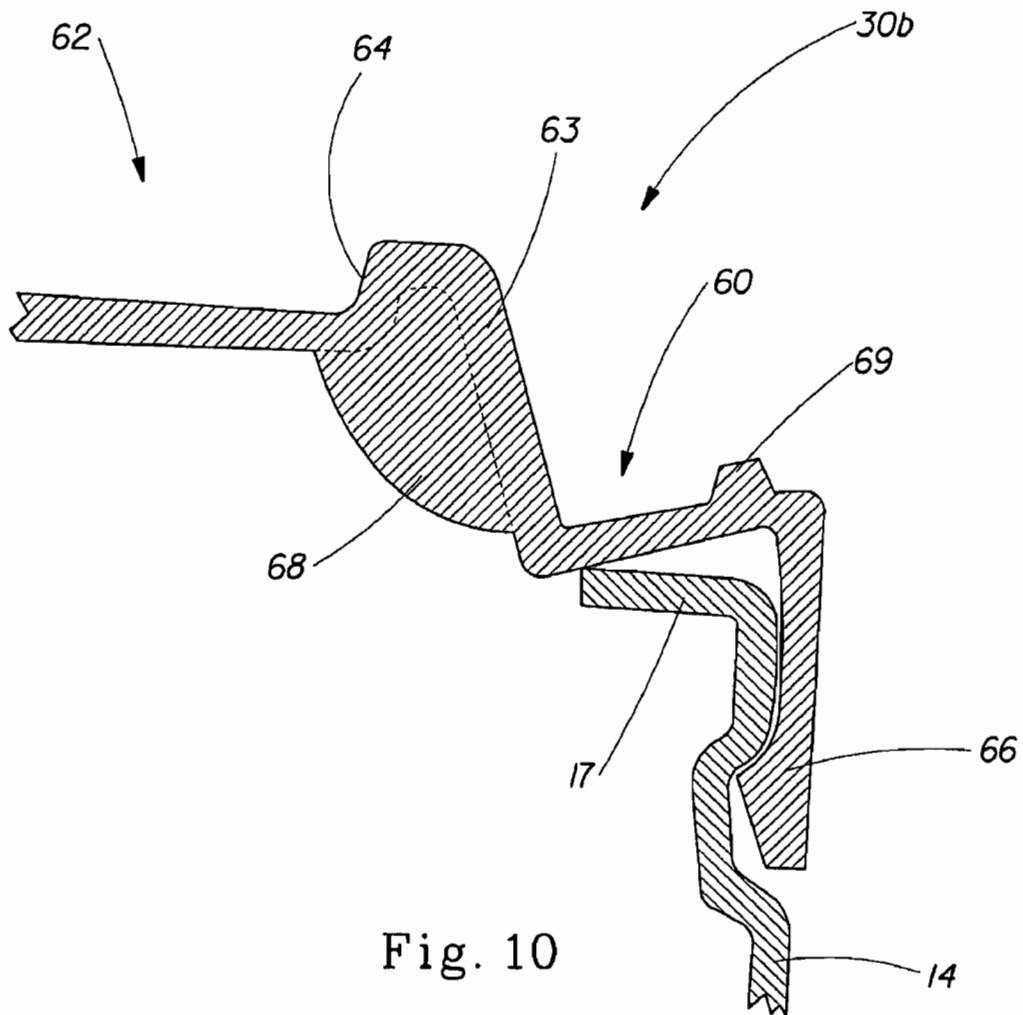


Fig. 10

U.S. Patent

Jan. 30, 2007

Sheet 8 of 10

US 7,169,419 B2

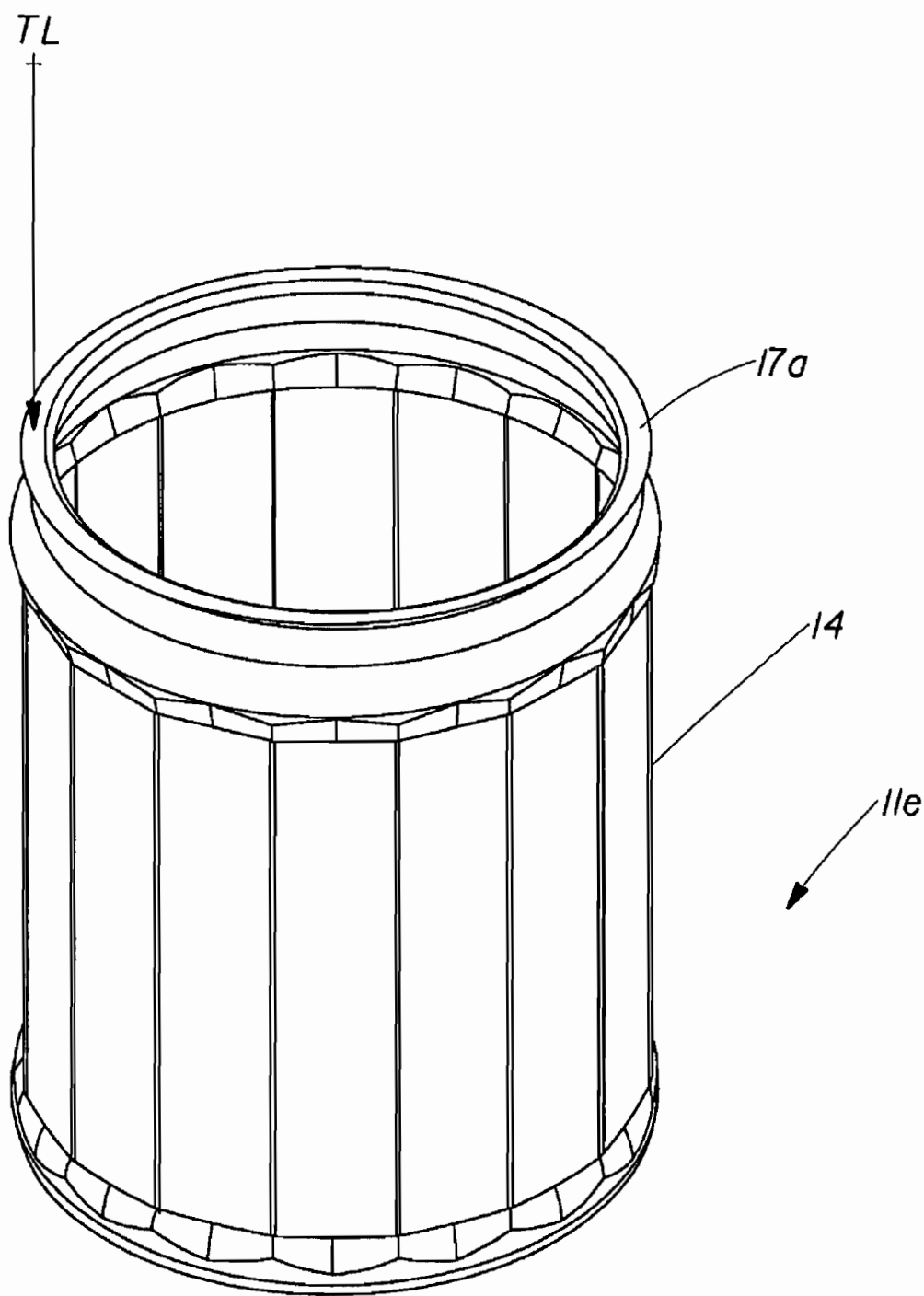


Fig. 11

U.S. Patent

Jan. 30, 2007

Sheet 9 of 10

US 7,169,419 B2

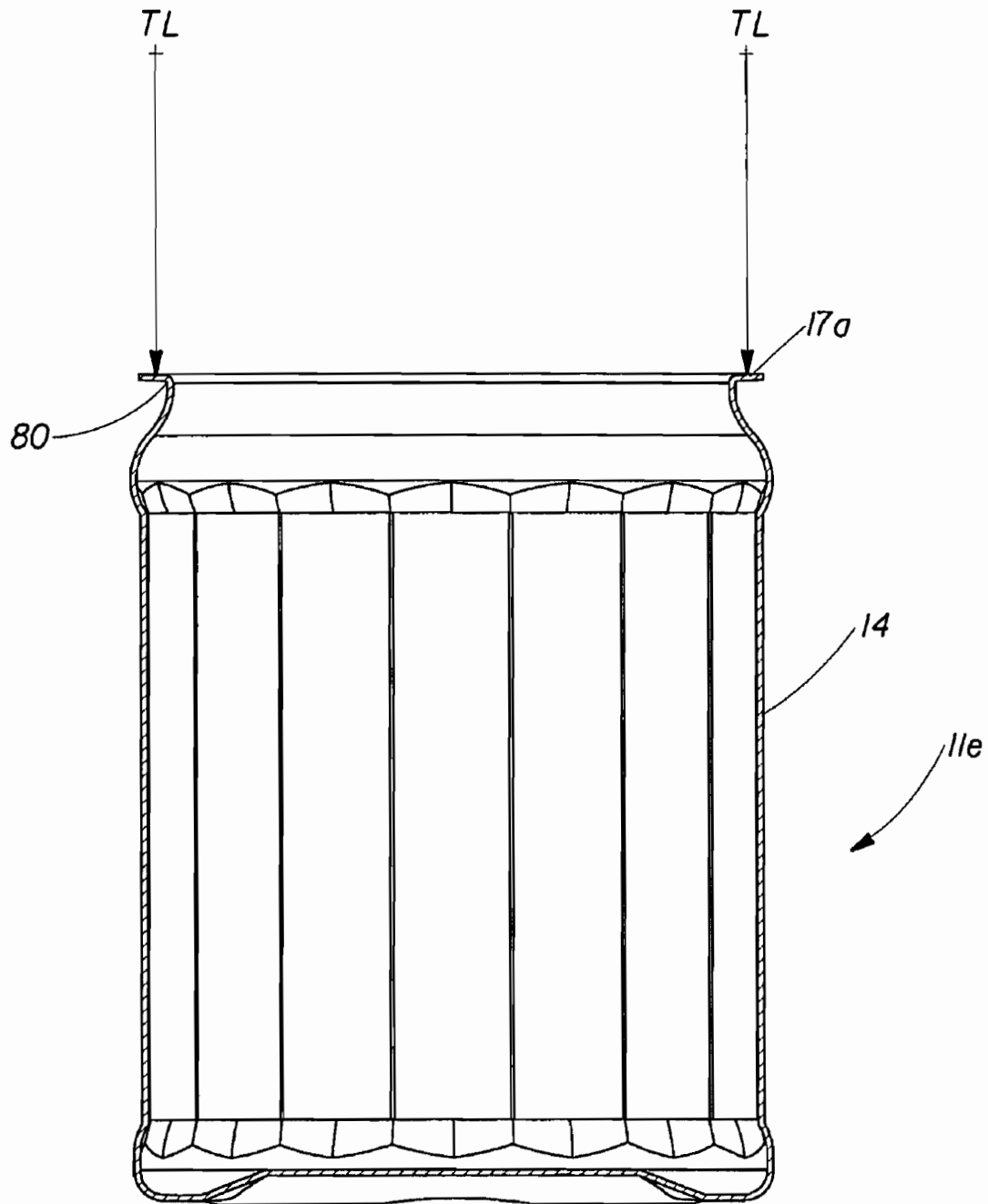


Fig. 12

U.S. Patent

Jan. 30, 2007

Sheet 10 of 10

US 7,169,419 B2

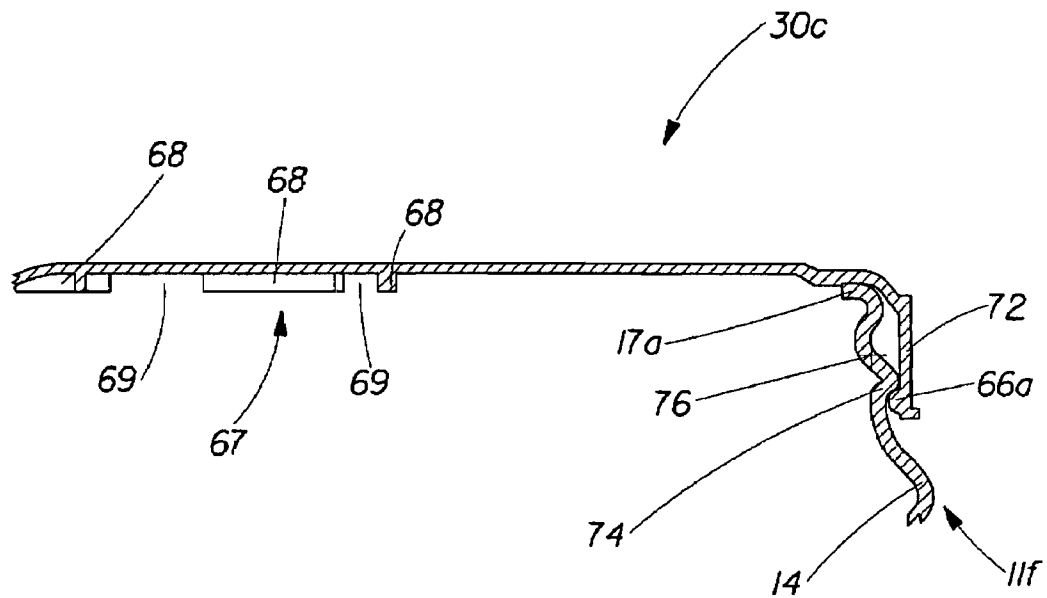


Fig. 13

US 7,169,419 B2

1

PACKAGING SYSTEM TO PROVIDE FRESH PACKED COFFEE

CROSS REFERENCE TO PRIOR APPLICATIONS

This application is a continuation-in-part of U.S. patent application Ser. No. 10/155,338, filed on May 24, 2002 (currently pending), which claims the benefit of U.S. Provisional Application Ser. No. 60/295,666, filed Jun. 4, 2001.

FIELD OF THE INVENTION

The present invention relates to a packaging system useful for packing fresh roast and ground coffee. The present invention still further relates to a more convenient, lightweight container that provides increased strength per mass unit of plastic for the transport of freshly roast and ground coffee.

BACKGROUND OF THE INVENTION

Packages such as cylindrical cans for containing a particulate product under pressure, such as roast and ground coffee, are representative of various articles to which the present invention is applicable. It is well known in the art that freshly roasted and ground coffee evolves substantial amounts of oils and gases, such as carbon dioxide, particularly after the roasting and grinding process. Therefore, roast and ground coffee is usually held in storage bins prior to final packing to allow for maximum off gassing of these volatile, natural products. The final coffee product is then placed into a package and subjected to a vacuum packing operation.

Vacuum packing the final coffee product results in reduced levels of oxygen in the headspace of the package. This is beneficial, as oxygen reactions are a major factor in the staling of coffee. A common package used in the industry is a cylindrical, tin-plated, and steel stock can. The coffee is first roasted, and then ground, and then vacuum packed within a can, which must be opened with a can opener, common to most households.

Packing coffee immediately after roasting and grinding provides substantial process savings, as the coffee does not require storage to complete the off-gas process. Also, the off-gas product usually contains high quantities of desirable volatile and semi-volatile aromatic compounds that easily volatilize and prevent the consumer from receiving the full benefit of the coffee drinking process. Furthermore, the loss of these aromatic compounds makes them unavailable for release in a standard container; thereby preventing the consumer from the full reception of the pleasurable burst of aroma of fresh roast and ground coffee. This aroma burst of volatile compounds is much more perceptible in a pressurized package than in a vacuum packed package.

It is therefore an object of the present invention to provide a handled package for roast and ground coffee that provides a lighter weight, fresher packing, easier-opening, peelable seal, and "burpable" closure alternative to a standard heavy can.

SUMMARY OF THE INVENTION

The present invention relates to a fresh packaging system for roast and ground coffee.

The present invention also relates to a method for packing coffee using the fresh packaging system for roast and ground coffee.

2

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is an exploded perspective view of a preferred embodiment of the fresh packing system in accordance with the present invention;

FIG. 2 is an exploded perspective view of an alternative embodiment of the fresh packing system;

FIG. 3 is a cross-sectional view of an exemplary closure and one-way valve assembly for the fresh packing system;

FIG. 4 is a cross-sectional view of an exemplary overcap assembly for a fresh packing system;

FIG. 5 is an expanded, cross-sectional view of the region labeled 5 in FIG. 4 of the overcap in an applied position;

FIG. 6 is an expanded, cross-sectional view of the region labeled 5 in FIG. 4 of the overcap in an expanded position;

FIG. 7 is an elevational view of an alternative embodiment of the fresh packing system;

FIG. 7A is a bottom planar view of the embodiment of FIG. 7;

FIG. 8 is a perspective view of an alternative embodiment of the fresh packing system;

FIG. 8a is a perspective view of an alternative embodiment of the fresh packing system;

FIG. 9 is an isometric view of an alternative exemplary overcap for use with a fresh packing system;

FIG. 9a is a bottom planar view of the alternative exemplary overcap of FIG. 9;

FIG. 10 is a cross-sectional view of the region labeled 10 in FIG. 9 in contact with a fresh packaging system;

FIG. 11 is a perspective view of an alternative embodiment of the fresh packaging system;

FIG. 12 is a cross-sectional view of FIG. 11 along line 12—12; and,

FIG. 13 is a cross-sectional view of another exemplary overcap assembly for a fresh packing system.

DETAILED DESCRIPTION OF THE INVENTION

The present invention is related to a fresh packaging system for roast and ground coffee. The packaging system comprises a container comprising a closed bottom, and open top and a body having an enclosed perimeter between the bottom and the top where the top, bottom, and body together define an interior volume. A flexible closure is removably attached and sealed to a protuberance disposed around the perimeter of the body proximate to the top. The container bottom and body are constructed from a material having a tensile modulus number ranging from at least about 35,000 (2,381 atm) pounds per square inch to at least about 650,000 pounds per square inch (44,230 atm), which provides a top load capacity of at least about 16 pounds (7.3 Kg).

The invention is more generally related to a method for the packing of coffee using the container of the present invention. The method steps include filling the container system described above with roast and ground coffee, flushing the container with an inert gas, and, sealing the container with a flexible closure.

The invention is also related to an article of manufacture that provides the end user with beneficial coffee aroma characteristics. The article comprises a closed bottom, an open top, and a polyolefin body forming an enclosed perimeter between said bottom and top together defining an interior volume. The body includes a protuberance continuously disposed around the perimeter of the body proximate to the top. A flexible closure is removably attached to the protuberance so that the closure forms a seal with the

US 7,169,419 B2

3

protuberance. Roast and ground coffee is contained within the interior volume and, the article of manufacture has an overall coffee aroma value of at least about 5.5. (A method for measuring the overall coffee aroma value is described in the Test Methods section, *infra*.)

The purpose of the present invention, inventive method, and article of manufacture is to provide a useful benefit to the user that includes, but is not limited to, providing a roast and ground coffee with a perceived more fresh and aromatic flavor. Such a container system of the present invention also provides an easy to use and low cost means of delivery of a roast and ground coffee to an end user.

Preferably, but optionally, the container has a handle element disposed thereon. More preferably the handle element is integral with the body of the container. This handle element facilitates gripping of the container system by the end user. This gripping is particularly useful for users with small hands or hands in a weakened condition due to illness, disease, or other medical malady.

Optionally, but preferably, the present invention features a one-way valve located within the closure to release excess pressure built up within the container due to the natural off gas process of roast and ground coffee. It is also believed that changes in external temperature and altitude can also cause the development of pressure internal to the container. The one-way valve is selected to release coffee off gas in excess of a predetermined amount however, remains sealed after such a release, thereby retaining an aromatically pleasing amount of off gassed product within the container.

Another optional, but preferred, feature of the present invention is an overcap placed over the closure. The overcap can comprise a dome, or cavity, that allows positive, outward deformation of the closure due to the pressure build-up within the container. The overcap is preferably air tight and flexible to allow for easy application in manufacture, either with, or without, a closure, and by the end user, after end user removal, of a closure. A flexible overcap can also allow the end user to remove excess air by compressing the dome, thereby releasing excess ambient air from the previously open container (burping). However, the overcap can also exhibit less flexibility or be inflexible. The overcap also provides for a tight seal against the rim of the container after opening by the end user. This tight seal prevents pollution of the rim, resulting in an undesirable expectation of the overcap after application. The overcap can also optionally allow for stacking several container embodiments when the closure and the dome portion of the overcap are at a point of maximum deflection. The overcap also optionally has a vent to allow for easy removal of vented off gas product trapped between the closure and overcap assemblies, but still allows for "burping."

In a preferred embodiment, the overcap can have a rib disposed proximate to and along the perimeter of the overcap defining an inner dome portion and an outer skirt portion. The rib forms a hinge-like structure so that outward deflection of the inner dome portion caused by deflection of the closure due to coffee off gassing causes the rib to act as a cantilever for the skirt portion. Thus, outward deflection of the dome portion causes the skirt portion to deflect inwardly on an outer portion of the container wall, resulting in an improved seal characteristic and improves retaining forces of the overcap with respect to the container.

The Container

Referring to FIG. 1, fresh packaging system 10, generally comprises a container 11 made from a compound, for example, a polyolefin. Exemplary and non-limiting com-

4

pounds and polyolefins that can be used for producing the present invention include polycarbonate, linear low-density polyethylene, low-density polyethylene, high-density polyethylene, polyethylene terephthalate, polypropylene, polystyrene, polyvinyl chloride, co-polymers thereof, and combinations thereof. It should be realized by one skilled in the art that container 11 of the present invention can take any number of shapes and be made of any number of suitable materials. Container 11 generally comprises an open top 12, a closed bottom 13, and a body portion 14. Open top 12, closed bottom 13, and body portion 14 define an inner volume in which a product is contained. Also, closed bottom 13 and body portion 14 are formed from a material having a tensile modulus ranging from at least about 35,000 pounds per square inch (2,381 atm) to at least about 650,000 pounds per square inch (44,230 atm), more preferably from at least about 40,000 pounds per square inch (2,721 atm) to at least about 260,000 pounds per square inch (17,692 atm), and most preferably ranging from at least about 95,000 pounds per square inch (6,464 atm) to at least about 150,000 pounds per square inch (10,207 atm). Tensile modulus is defined as the ratio of stress to strain during the period of elastic deformation (i.e., up to the yield point). It is a measure of the force required to deform the material by a given amount and is thus, a measure of the intrinsic stiffness of the material.

It is preferred that bottom portion 13 be disposed concave inwardly, or recessed, towards the inner volume so that undesirable deflections caused by pressure increases within the inner volume are minimized. If the bottom 13 expands outwardly sufficiently, causing the bottom 13 to concave outwardly, then the container 11 will develop what is generally referred to in the art as "rocker bottom." That is, if the bottom 13 deflects outwardly so that the container system 10 will not be stable while resting on a flat surface, fresh packaging system 10 will tend to rock back and forth.

As shown in FIG. 7A, a plurality of protrusions 40 can be disposed on the closed bottom 13 of container 11 about the longitudinal axis of container 11. In a preferred embodiment, protrusions 40 form an oblique angle with the closed bottom 13 of container 11. If the container 11 assumes a cylindrical shape, it is believed that protrusions 40 can be rectilinearly disposed about the diameter of the closed bottom 13 of container 11. However, one of skill in the art would realize that protrusions 40 could be disposed on the closed bottom 13 of container 11 in any geometrical arrangement. Without wishing to be bound by theory, it is believed that protrusions 40 can protrude past the geometry of the closed bottom 13 of container 11 upon an outward deflection of the closed bottom 13 of container 11. In this way container 11 can maintain a stable relationship with other surfaces should "rocker bottom" be realized upon the development of an outward pressure from within container 11. While the preferred embodiment utilizes four protrusions 40 disposed on closed bottom 13, it should be realized by one of skill in the art that virtually any number of protrusions 40 could be disposed on closed bottom 13 to yield a stable structure upon outward deflection of closed bottom 13. Additionally, protrusions 40 could be a square, triangular, elliptical, quad-lobe, pentaloid, trapezoidal, arranged in multiply nested configurations, provided in an annular ring about closed bottom 13, and combinations thereof.

Again referring to FIG. 7A, an annular ring 42, or any other raised geometry, including interrupted geometrical configurations, can be disposed on closed bottom 13 of container 11. Annular ring 42 could be dimensioned to facilitate nesting, or stacking, of multiple embodiments of containers 11. In other words, annular ring 42 could be

US 7,169,419 B2

5

designed to provide serial stacking of a container 11 onto the overcap 30 of the preceding, or lower, container 11. Without wishing to be bound by theory, it is believed that the facilitation of nesting by the use of annular ring 42 disposed on closed bottom 13 of container 11 provides enhanced structural stability.

It is also believed that the closed bottom 13 of container 11 could be designed, in what is known to those of skill in the art, as a quad lobe, or pentaloid. Again, without desiring to be bound by theory, it is believed that such a quad lobe, or pentaloid, design could provide enhanced ability to resist the deformation of closed bottom 13 of container 11 due to internal pressures developed within container 11.

Referring again to FIG. 1, container 11 can be cylindrically shaped with substantially smooth sides. Handle portions 15 are respectively formed in container body portion 14 at arcuate positions. A plurality of anti-slip strips 16 can be formed at a predetermined interval within handle portions 15. Handle portions 15 are formed as would be known to one skilled in the art to provide a gripping surface at a most efficacious position to enable users with small hands or debilitating injuries or maladies to grip container portion 11 with a minimum of effort. Further, container 11 can be readily grasped by hand due to the configuration described above. Additionally, container 11 can have a protuberance 17 in the form of a rim like structure disposed at the open end of container 11. Protuberance 17 can provide a surface with which to removeably attach closure 18 and provide a locking surface for skirt portion 32 of overcap 30.

In an alternative embodiment as shown in FIG. 2, container 11a is parallelepiped shaped with substantially smooth sides. Handle portions 15a are respectively formed in container body portion 14a at arcuate positions. A plurality of gripping projections 16a are formed at a predetermined interval within handle portions 15a. Corresponding closure 18a and overcap 30a are fitted on container 11a as would be known to one skilled in the art.

In an alternative embodiment, as shown in FIG. 7, handle portions 15b can preferably be symmetrical. Without desiring to be bound by theory, it is believed that symmetrical handle portions 15b could prevent inversion of the handle portions 15b upon an increase in pressure from within container 11b. It is believed that symmetrically incorporated handle portions 15b provides for the uniform distribution of the internal pressure, developed within container 11, throughout handle portion 15b.

As is also shown in the alternative embodiment of FIG. 7, all portions of handle portions 15b are presented as either parallel to the longitudinal axis of container 11b or perpendicular to the longitudinal axis of container 11b. Without desiring to be bound by theory, it is believed that handle portions 15b, arranged to provide all component portions of handle portions 15b to be either parallel or perpendicular to the longitudinal axis of container 11b, could be less susceptible to bending forces due to internal pressures developed within container 11b. This could aid in the prevention of catastrophic failure of the container due to the pressures generated internally to container 11b.

Further, providing container 11b with handle portions 15b in a recessed configuration with respect to the body portion 14b of container 11b could require less force from the end user to maintain a firm grip on handle portions 15b of container 11b. Additionally, recessed handle portions 15b could aid in the prevention of an end user supplying extraneous force to the external portions of container 11b thereby causing catastrophic failure or deformation of container 11b.

6

Referring again to FIG. 1, container 11 exhibits superior top load strength per mass unit of plastic. With the present invention, filled and capped containers can be safely stacked one upon another without concern that the bottom containers will collapse or be deformed. Often, containers are palletized, by which several containers are stacked in arrays that take on a cubic configuration. In the order of 60 cases, each weighing about 30 pounds (13.6 Kg) can be loaded onto a pallet. In certain instances, these pallets can be stacked one upon another. It will be appreciated that the bottommost containers will be subjected to extraordinary columnar forces. Traditionally, polymeric containers are not capable of withstanding such high column forces. Thus, to avoid collapsing or buckling of these stacking situations, the top load resistance of each container should be at least about 16 pounds (7.3 Kg) when the containers are in an ambient temperature and pressure environment. More preferably, each container should exhibit a top load resistance of at least about 48 pounds (21.8 Kg) in accordance with the present invention.

In the present invention, top load resistance is the amount of force an empty container can support prior to the occurrence of a deflection parallel to the longitudinal axis of the container of greater than 0.015 inches. By way of a non-limiting example, a cylindrical container comprising a laminate structure (as detailed infra), having an average overall mass of 39 grams, an average internal volume of approximately 950 cubic centimeters, an average wall thickness of approximately 0.030 inches, and an average diameter of approximately 100 millimeters is considered not to have a top load resistance greater than 16 pounds (7.3 Kg) when the container deflects more than 0.015 inches in a direction parallel to the longitudinal axis when a 16 pound load is placed thereupon. As is known to one of skill in the art, top load resistance can be measured using a suitable device such as an Instron, model 550R1122, manufactured by Instron, Inc., Canton, Mass. The Instron is operated in a compressive configuration with a 1000 pound load cell and a crosshead speed of 1.0 inch/minute. The load is applied to the container through a platen that is larger than the diameter of the subject container.

As shown in FIG. 7, the body portion 14b of container 11b can have at least one region of deflection 43 placed therein to isolate deflection of the container 11b due to either pressures internal to container 11b or pressures due to forces exerted upon container 11b. As shown, at least one region of deflection 43 could generally define rectilinear regions of container 11b defined by a cylindrical wall. However, one of skill in the art would realize that at least one region of deflection 43 incorporated into body portion 14b could assume any geometry, such as any polygon, round, or non-uniform shape. Without wishing to be bound by theory, it is believed that a purely cylindrical container 11b, having a uniform wall thickness throughout, will resist compression due to pressure exerted from within container 11b or external to container 11b. However, without desiring to be bound by theory, it is believed that when applied forces exceed the strength of the container wall of purely cylindrical container 11b, deflection could be exhibited in an undesirable denting or buckling. Any non-uniformities present in a purely cylindrical container 11b, such as variations in wall thickness, or in the form of features present, such as handle portions 15b, can cause catastrophic failure upon a differential pressure existing between regions external to container 11b and regions internal to container 11b.

However, the incorporation of at least one region of deflection 43 is believed to allow flexion within the body

US 7,169,419 B2

7

portion 14b of container 11b. Thus, it is believed that body portion 14b can deform uniformly without catastrophic failure and can resist undesirable physical and/or visual effects, such as denting. In other words, the volume change incurred by container 11b due to internal, or external, pressures works to change the ultimate volume of the container 11b to reduce the differential pressure and thus, forces acting on the container wall. It is also believed, without desiring to be bound by theory, that the incorporation of a solid or liquid, or any other substantially incompressible material, can provide substantial resistance to the inward deflection of at least one region of deflection 43. For example, the inclusion of a powder, such as roast and ground coffee, could provide resistance to the inward deflection of at least one region of deflection 43, thus enabling at least one region of deflection 43 to remain substantially parallel to the longitudinal axis of container 11b and thereby providing an effective increase in the top load capability of container 11b. The peelable laminate seal also deflects with external pressure changes further reducing the pressure load on the container.

In a non-limiting, but preferred embodiment, container 11b has at least one region of deflection 43 that can be presented in the form of rectangular panels. The panels have a radius that is greater than the radius of container 11b. The panels are designed to have less resistance to deflection than that of the region of container 11b proximate to the rectangular panels. Thus, any movement exhibited by the panels is isolated to the panels and not to any other portion of container 11b.

As shown in FIG. 1, without desiring to be bound by theory, it is believed that the chime should be sufficient to allow container 11 to compress under vacuum by adapting to base volume changes and will improve the top loading capability of container 11. However, it is further believed that the chime should be as small as is practicable as would be known to one of skill in the art.

As shown in FIG. 7, the body portion 14b of container 11b can also have at least one rib 45 incorporated therein. It is believed that at least one rib 45 can assist in the effective management of isolating the movement of at least one panel 43 by positioning at least one rib 45 parallel to the longitudinal axis of container 11b and proximate to at least one panel 43 in order to facilitate the rotational movement of at least one panel 43 upon an inward, or outward, deflection of at least one panel 43. Further, it is believed that at least one rib 45 can also provide added structural stability to container 11b in at least the addition of top load strength. In other words, at least one rib 45 could increase the ability of container 11b to withstand added pressure caused by the placement of additional containers or other objects on top of container 11b. One of skill in the art would be able to determine the positioning, height, width, depth, and geometry of at least one rib 45 necessary in order to properly effectuate such added structural stability for container 11b. Further, it would be known to one of skill in the art that at least one rib 45 could be placed on container 11b to be parallel to the longitudinal axis of container 11b, annular about the horizontal axis of container 11b, or be of an interrupted design, either linear or annular to provide the appearance of multiple panels throughout the surface of container 11b.

Additionally, container 11b can generally have a finish 46 incorporated thereon. In a preferred embodiment, the finish 46 is of an annular design that is believed can provide additional hoop strength to container 11b and surprisingly, can provide a finger well 44 to assist the user in removal of

8

overcap 30. Further, it is possible for one of skill in the art to add ribs 47 to finish 46 in order to provide further strength to container 11b in the form of the added ability to withstand further top loading. In a preferred embodiment, ribs 47 are disposed parallel to the horizontal axis of container 11b and perpendicular to finish 46.

Referring to FIGS. 11 and 12, it was found that a container 11e provided with a protuberance 17a that is at least substantially outwardly facing from body portion 14 and substantially perpendicular to the longitudinal axis of container 11e can have less induced structural stress caused by a vacuum internal to container 11e in the junction 80 proximate to the interface of protuberance 17a and body portion 14. Without desiring to be bound by theory, it is believed that such forces exerted on an outwardly facing protuberance 17a would cause an increase in the radius of curvature of protuberance 17 with respect to body portion 14, thereby reducing the overall vacuum induced stresses on the container 11e. Reducing vacuum-induced stresses can facilitate producing container 11e with a smaller overall wall thickness.

In addition, it can be desirable for container 11e to be provided with at least a substantially outwardly facing protuberance 17a so that static vertical loads (TL) are transferred through the body portion 14 rather than through protuberance 17a. Without desiring to be bound by theory, it is believed that transferring the forces exerted by a load (TL) positioned on top of container 11e through body portion 14 rather than upon protuberance 17a can reduce overall stresses at junction 80 of protuberance 17a with body portion 14. This reduction in stresses at junction 80 can facilitate producing container 11e with a smaller overall wall thickness.

Further, container 11e can be combined with an overcap (not shown) that can substantially direct the forces exerted by a load to body portion 14 rather than to protuberance 17a. It is believed that any stress at junction 80 caused by a load positioned on top of container 11e having such an overcap (not shown) disposed thereon can be reduced because the deflection of the cantilevered protuberance 17a is restrained. This can result in lower concentrations of stress at junction 80.

Returning again to FIG. 1, the container 11 is preferably produced by blow molding a polyolefinic compound. Polyethylene and polypropylene, for example, are relatively low cost resins suitable for food contact and provide an excellent water vapor barrier. However, it is known in the art that these materials are not well suited for packaging oxygen-sensitive foods requiring a long shelf life. As a non-limiting example, ethylene vinyl alcohol (EVOH) can provide such an excellent barrier. Thus, a thin layer of EVOH sandwiched between two or more polyolefinic layers can solve this problem. Therefore, the blow-molding process can be used with multi-layered structures by incorporating additional extruders for each resin used. Additionally, the container of the present invention can be manufactured using other exemplary methods including injection molding and stretch blow molding.

In a preferred embodiment in accordance with the present invention, container 11 of FIG. 1, container 11a of FIG. 2, and container 11b of FIG. 7, can be blow molded from a multi-layered structure to protect an oxygen barrier layer from the effects of moisture. In a preferred embodiment, this multi-layered structure can be used to produce an economical structure by utilizing relatively inexpensive materials as the bulk of the structure.

US 7,169,419 B2

9

Another exemplary and non-limiting example of a multi-layered structure used to manufacture the container of the present invention would include an inner layer comprising virgin polyolefinic material. The next outward layer would comprise recycled container material, known to those skilled in the art as a 'regrind' layer. The next layers would comprise a thin layer of adhesive, the barrier layer, and another adhesive layer to bind the barrier layer to the container. The final outer layer can comprise another layer of virgin polyolefinic material.

A further exemplary and non-limiting example of a multi-layered structure used to manufacture the container of the present invention would include an inner layer comprising virgin polyolefinic material. The next layers would comprise a thin layer of adhesive, the barrier layer, and another adhesive layer to bind the barrier layer to the container. The next outward layer would comprise recycled container material, known to those skilled in the art as a 'regrind' layer. The final outer layer can comprise another layer of virgin polyolefinic material. In any regard, it should be known to those skilled in the art that other potential compounds or combinations of compounds, such as polyolefins, adhesives and barriers could be used. Further, an oxygen scavenger can be incorporated into, or on, any layer of a multi-layered structure to remove any complexed or free oxygen existing within a formed container. Such oxygen scavengers can include oxygen scavenging polymers, complexed or non-complexed metal ions, inorganic powders and/or salts, and combinations thereof, and/or any compound capable of entering into polycondensation, transesterification, transamidization, and similar transfer reactions where free oxygen is consumed in the process.

Other such materials and processes for container formation are detailed in *The Wiley Encyclopedia of Packaging Technology*, Wiley & Sons (1986), herein incorporated by reference. Preferably, the inner layer of containers 11, 11a, and 11b are constructed from high-density polyethylene (HDPE).

A preferred polyolefinic, blow molded container in accordance with the present invention can have an ideal minimum package weight for the round containers of FIGS. 1 and 7, or the parallelepiped container of FIG. 2, and yet still provide the top load characteristics necessary to achieve the goals of the present invention. Exemplary materials (low-density polyethylene (LDPE), high density polyethylene (HDPE) and polyethylene terephthalate (PET)) and starting masses of these compounds that provide sufficient structural rigidity in accordance with the present invention are detailed in Table 1 below.

TABLE 1

Package Shape and Weight For a Given Material and a Defined Top Load (Empty) for a Nominal 3.0 L Container			
Package Configuration	Package Material & Tensile Modulus (psi/atm)	Package Weight 35 lb. Top Load (grams)	Package Weight 120 lb. Top Load (grams)
Parallelepiped	LDPE (40,000/2,721)	79 grams	146 grams
Parallelepiped	HDPE (98,000/6,669)	66 grams	123 grams
Parallelepiped	PET (600,000/40,828)	40 grams	74 grams
Round	LDPE (40,000/2,721)	51 grams	95 grams

10

TABLE 1-continued

Package Shape and Weight For a Given Material and a Defined Top Load (Empty) for a Nominal 3.0 L Container			
Package Configuration	Package Material & Tensile Modulus (psi/atm)	Package Weight 35 lb. Top Load (grams)	Package Weight 120 lb. Top Load (grams)
Round	HDPE (98,000/6,669)	43 grams	80 grams
Round	PET (600,000/40,828)	26 grams	48 grams

It was surprisingly found that a container in accordance with the present invention that is filled with product and sealed to contain the final product has enhanced properties for the same starting compound weight. This provides a benefit in that it is now possible to use less starting material to provide the top load values in accordance with the present invention. Exemplary materials and starting masses of compounds (LDPE, HDPE, and PET) providing the necessary structural rigidity of a filled and sealed container in accordance with the present invention are detailed in Table 2.

TABLE 2

Package Shape and Weight For a Given Material and a Defined Top Load (Filled) for a Nominal 3.0 L Container			
Package Configuration	Package Material & Tensile Modulus (psi/atm)	Package Weight 35 lb. Top Load (grams)	Package Weight 120 lb. Top Load (grams)
Parallelepiped	LDPE (40,000/2,721)	72 grams	134 grams
Parallelepiped	HDPE (98,000/6,669)	61 grams	112 grams
Parallelepiped	PET (600,000/40,828)	37 grams	68 grams
Round	LDPE (40,000/2,721)	47 grams	87 grams
Round	HDPE (98,000/6,669)	39 grams	73 grams
Round	PET (600,000/40,828)	24 grams	44 grams

Again referring to FIG. 1, protuberance 17, in the form of a rim like structure, disposed at the open end of container 11 may have textured surfaces disposed thereon. Textured surfaces disposed on protuberance 17 can comprise raised surfaces in the form of protuberances, annular features, and/or cross-hatching to facilitate better sealing of removable closure 19. Exemplary, but non-limiting, annular features may include a single bead or a series of beads as concentric rings protruding from the seal surface of protuberance 17. While not wishing to be bound by theory, it is believed that a textured surface on protuberance 17 can allow for the application of a more uniform and/or concentrated pressure during a sealing process. Textured surfaces can provide increased sealing capability between protuberance 17 and removable closure 19 due to any irregularities introduced during molding, trimming, shipping processes and the like during manufacture of container 11.

The Removable Closure

Again referring to FIG. 1, fresh packaging system 10 comprises a closure 18 that is a laminated, peelable seal 19 that is removeably attached and sealed to container 11. Peelable seal 19 has a hole beneath which is applied a

US 7,169,419 B2

11

degassing valve, indicated as a whole by reference number 20. One-way valve 20 can be heat welded or glued to peelable seal 19.

In a preferred embodiment according to FIG. 3, the interior of peelable seal 19 to the outer side of peelable seal 19 is a laminate and comprises, in sequence, an inner film 21, such as polyethylene, a barrier layer 22, such as a metallized sheet, preferably metallized PET, metallized PE, or aluminum, and an outer film of plastic 23, such as PET. Inner film 21 is preferably formed from the same material as the outer layer of container 11. Thus, inner film 21 is preferably a polyolefin, and more preferably polyethylene (PE). Plastic outer film 23 is preferably produced from a material such as polyester. However, one skilled in the art would realize that other materials, such as a foil closure, and other stretchable and non-stretchable layer structures can be used and still remain within the scope of the present invention. Additionally, an oxygen scavenger, as described supra, can be incorporated into, or on, any layer of peelable seal 19 to remove free, or complexed, oxygen.

Both inner film 21 and barrier layer 22 are perforated, preferably by means of cuts, pricks, or stampings, to form flow opening 24, as shown in FIG. 3. In the area above the outlet opening, outer film 23 is not laminated to barrier layer 22, thereby forming longitudinal channel 25. Channel 25 extends the entire width of the laminate so that during manufacture, channel 25 extends to the edge of closure 18.

As a result, a very simple and inexpensive one-way valve 20 is formed by means of the non-laminated area of outer film 23 and outlet opening 24. The gases produced by the contents within container 11 may flow through valve 20 to the surrounding environment. Since an overpressure exists in container 11, and since outer film 23 usually adheres or at least tightly abuts barrier layer 22 because of the inner pressure, unwanted gases, such as oxygen, are prevented from flowing into container 11 and oxidizing the contents. Thus, outer film 23 serves as a membrane that must be lifted by the inner gas pressure in the packing in order to release gas. It is preferred that one-way valve 20 respond to pressures developed within container 11. This pressure can exceed 10 millibars, and preferably exceed 15 millibars, and more preferably would exceed 20 millibars, and most preferably, exceed 30 millibars.

Additionally, a small amount of liquid can be filled into channel 25. The liquid can be water, siloxane-based oils, or oil treated with an additive so that the oil is prevented from becoming rancid prior to use of the product. The pressure at which the release of internal off gas from container 11 occurs can be adjusted by varying the viscosity of the liquid within channel 25.

In an alternative, but non-limiting, embodiment, a one-way degassing valve can comprise a valve body, a mechanical valve element, and a selective filter as described in U.S. Pat. No. 5,515,994, herein incorporated by reference.

Returning to FIG. 1, Closure 18 is preferably sealed to container 11 along a rim (protuberance) 17 of container 11. Preferable, but non-limiting, methods of sealing include a heat sealing method incorporating a hot metal plate applying pressure and heat through the closure material and the container rim, causing a fused bond. The peel strength achieved is generally a result of the applied pressure, temperature, and dwell time of the sealing process. However, it should be known to one skilled in the art, that other types of seals and seal methods could be used to achieve a bond with sufficient and effective seal strength, including, but not limited to, a plurality of annular sealing beads disposed on rim 17.

12

Alternatively, if protuberance 17 is provided in at least a substantially outwardly facing orientation from body portion 14 and substantially perpendicular to the longitudinal axis of container 10, protuberance 17 can be supported during the sealing process. Providing support in this manner can allow for a seal to be applied in less overall time through the use of higher temperature and pressure than would be possible if the flange were unsupported. It is also believed that supporting protuberance 17 during the sealing process can result in a higher quality seal, provide less variation in the seal, and provide a more consistent peel force. It is also believed that supporting protuberance 17 during a sealing process can reduce the time necessary to provide such seals resulting in lower production costs.

As shown in FIG. 8, in an alternative embodiment, peelable seal 19c of container 11c can include a pivotable pouring device 50. Pivotable pouring device 50 can be placed at any location on peelable seal 19a or at any position on container 11c. In a preferred embodiment, it is also believed that pivotable pouring device 50 could be disposed on a non-peelable seal located under peelable seal 19c in the interior volume of container 11c. This could enable a user to remove peelable seal 19c, exposing the non-peelable seal having the pivotable pouring device 50 disposed thereon. The user could then pivot the pivotable pouring device 50 to dispense a product contained within container 11c. After dispensing the product from container 11c via pivotable pouring device 50, the user could pivot the pivotable pouring device 50 to effectively close non-peelable seal, thereby effectively sealing container 11c. As would be known to one of skill in the art, exemplary, but non-limiting, examples of pivotable pouring device 50 include pouring spouts. It is believed that pivotable pouring device 50 could have dimensions that facilitate the flow of product from container 11c, as would be known to one of skill in the art. A depression, slot, or other orifice can be disposed on either peelable seal 19c or the non-peelable seal to facilitate insertion of a user's appendage or other device to aid in the application of force necessary to pivot pivotable pouring device 50.

In the alternative embodiment of FIG. 8a, a striker bar 52, formed from either a portion of peelable seal 19d or a non-peelable seal, can be used to strike off excess product from a volumetric measuring device. Without wishing to be bound by theory, it is believed that striker bar 52 could facilitate more consistent measurements of product by increase the packing density and volume present within the volumetric measurement device. Further, it is believed that the presence of the remainder of peelable seal 19d or a non-peelable seal can assist in the retention of the various aromatic and non-aromatic gasses that naturally evolves from a product held within container 11d.

The Overcap

Referring to FIG. 1, fresh packaging system 10 optionally comprises an overcap 30 comprised of dome portion 31, skirt portion 32, rib 33, and optionally vent 34. As a non-limiting example, overcap 30 is generally manufactured from a plastic with a low flexural modulus, for example, linear low-density polyethylene (LLDPE), low-density polyethylene (LDPE), high-density polyethylene (HDPE), polyethylene (PE), polypropylene (PP), linear low-density polyethylene (LLDPE), polycarbonate, polyethylene terephthalate (PET), polystyrene, polyvinyl chloride (PVC), copolymers thereof, and combinations thereof. This allows for an overcap 30 that has a high degree of flexibility, yet, can still provide sufficient rigidity to allow stacking of successive containers. By using a flexible overcap 30, mechanical

US 7,169,419 B2

13

application during packaging as well as re-application of overcap 30 to container 11 after opening by the consumer is facilitated. A surprising feature of a flexible overcap 30 is the ability of the end user to "burp" excess atmospheric gas from container 11 thereby reducing the amount of oxygen present. Further, an oxygen scavenger, as described supra, can be incorporated into, or on, any layer of peelable seal 19 to remove free, or complexed, oxygen. Additionally, the desired balance of flexibility and rigidity exhibited by overcap 30 is to varying the thickness profile of the overcap 30. For example, the dome portion 31 can be manufactured to be thinner than skirt portion 32 and rib 33.

Dome portion 31 is generally designed with a curvature, and hence height, to accommodate for an outward displacement of closure 18 from container 11 as a packaged product, such as roast and ground coffee, off gases. The amount of curvature needed in dome portion 31 can be mathematically determined as a prediction of displacement of closure 18. As a non-limiting example, a nominal height of dome portion 31 can be 0.242 inches (0.61 cm) with an internal pressure on closure 18 of 15 millibars for a nominal 6-inch (15.25 cm) diameter overcap. Further, the dome portion 31 is also generally displaceable beyond its original height as internal pressure rises in container 11, causing closure 18 to rise prior to the release of any off gas by one-way valve 20.

As shown in the exemplary embodiment of FIG. 9A, stand-off 67 can be provided on the underside of overcap 30b to facilitate the release of an off gas that may be present within a container. In this way, stand-off 67 can prevent blockage of a valve disposed on and/or within a flexible film closure by lower portion 65 of overcap 30b by reducing the amount of contact of the valve with lower portion 65. Stand-off 67 can be constructed in various designs including but not limited to a singular, or plurality of, arcuate forms, circles, rectangles, lines, and combinations thereof. Preferably, a circular stand-off 67 is positioned in a region central to lower portion 65 of overcap 30b. It is believed that stand-off 67 can also facilitate the venting of gasses internal to a container. Another such exemplary stand-off 67 is shown in FIG. 13 as a plurality of annular sections 68, wherein each annular section 68 is provided with an opening 69 wherein the plurality of openings 69 provides a path for venting of gasses internal to container 11.

Referring to FIG. 4, overcap 30 comprises a rib 33. Rib 33 protrudes outwardly from the generally planar dome portion 31 and serves as a physical connection between dome portion 31 and skirt 32. Generally, skirt 32 has a hook shape for lockingly engaging protuberance 17 of container 11. Rib 33 isolates skirt 32 from dome portion 31, acting as a cantilever hinge so that outward deflections (O) of dome portion 31 are translated into inward deflections (I) of skirt 33. This cantilevered motion provides for an easier application of overcap 30 to container 11 and serves to effectively tighten the seal under internal pressures.

Additionally, rib 33 can allow for successive overcaps to be stacked for shipping. Skirt 32 preferably has a flat portion near the terminal end to allow for nesting of successive overcaps. Furthermore, rib 33 can extend sufficiently away from dome portion 31 so that successive systems may be stacked with no disruption of the stack due to a maximum deflection of closure 18 and the dome portion 31 of overcap 30. Without desiring to be bound by theory, it is believed that the downward load force rests entirely on rib 33 rather than across dome portion 31. Resting all downward forces on rib 33 also protects closure 18 from a force opposing the outward expansion of closure 18 from container 11 due to the off gas generated by a contained product.

14

As shown in FIG. 5, an exploded view of the region around rib 33, dome portion 31 correspondingly mates with protuberance 17 of container 11. As a non-limiting example, container 11, after opening, requires replacement of overcap 30. A consumer places overcap 30 on container 11 so that an inside edge 34 of rib 33 contacts protuberance 17. A consumer then applies outward pressure on skirt 32 and downward pressure on dome portion 31, expectorating a majority of ambient air entrapped within the headspace of container 11. As shown in FIG. 6, the inside edge 34 of rib 33 then fully seats on protuberance 17, producing a complete seal. In a non-limiting example, protuberance 17 varies from -5° to $+5^{\circ}$ from a line perpendicular to body 14. Inside edge 34 is designed to provide contact with protuberance 17 for this variation. As another non-limiting example, overall travel of the inside edge 34 of rib 33 has been nominally measured at three millimeters for a protuberance 17 width of four to six millimeters. It has been found that when protuberance 17 is angularly disposed, protuberance 17 forms a sufficient surface to provide for sealing adhesive attachment of closure 18 to protuberance 17.

Additionally, the inside edge 34 of rib 33 can effectively prevent the pollution of protuberance 17, with or without closure 18 in place, thereby providing a better seal. As pressure within container 11 builds due to off gas from the entrained product, dome portion 31 of overcap 30 deflects outward. This outward deflection causes the inside edge 34 of rib 33 to migrate toward the center of container 11 along protuberance 17. This inward movement results in a transfer of force through rib 33 to an inward force on skirt portion 32 to be applied to container wall 14 and the outer portion of protuberance 17, resulting in a strengthened seal. Additionally, significant deflections of dome 31 due to pressurization of closure 18 causes the inside edge 34 to dislocate from protuberance 17 allowing any vented off gas to escape past protuberance 17 to the outside of overcap 30. This alleviates the need for a vent in overcap 30.

As shown in FIG. 9, in an alternative embodiment of overcap 30b comprises a plurality of nested cylindrical formations. In other words, in this alternative embodiment, the base of overcap 30b, having a diameter, d, forms a base portion 60 upon which the upper portion 62 of overcap 30b, having a diameter, d- Δ d, is disposed thereon. The upper portion 62 of overcap 30b can have an annular protuberance 64 disposed thereon. It is believed that the annular protuberance 64 disposed upon the upper portion 62 of overcap 30b can provide a form upon which annular ring 42 disposed upon closed bottom 13, can lockably nest.

In another embodiment, it has been found advantageous to limit Δ d. A small Δ d can result in the connecting wall 63 of overcap 30b being proximate to protuberance 17. Providing a small Δ d in this manner can facilitate the transfer of a force exerted by a load disposed upon overcap 30 to an attached container during storage and shipping.

As shown in FIGS. 9a and 10, in an alternative embodiment, the inner surface of the base portion 60 of overcap 30b can have an annular sealing ring 66 disposed thereon. Annular sealing ring 66 was surprisingly found to facilitate the mating of surfaces corresponding to annular sealing ring 66 and the finish portion of container 11. Mating the surfaces in this manner can provide an audible recognition that both surfaces have made contact and that a secure seal between protuberance 17 and the internal surface of overcap 30b has been made. A surprising feature of overcap 30b is the ability of the end user to "burp" excess atmospheric gas from container 11 thereby reducing the amount of oxygen present. Further, it is believed that an inner surface of base portion 60

US 7,169,419 B2

15

mate with at least a portion of protuberance 17 so that there is provided an overlap of the inner surface of base portion 60 with protuberance 17. One of skill in the art would realize that any configuration of the annular sealing ring 66 may be used to provide the facilitation of the corresponding mating surfaces, including, but not limited to, interrupted annular rings, a plurality of protuberances, and combinations thereof. It is also believed that providing a protuberance 69 in the form of an annular ring, plurality of protuberances, and other protuberances known to one of skill in the art, can provide a method of stacking a plurality of overcaps 30b prior to overcap 30b being applied to a container.

As shown in FIG. 9a, it was surprisingly found that a plurality of protuberances 68 disposed upon the inner surface of overcap 30b could facilitate the replacement of overcap 30b upon container 11. In this manner, it is believed that the plurality of protuberances 68 disposed upon the inner surface of overcap 30b can effectively translate the horizontal component of a force applied to overcap 30b during replacement of overcap 30b upon container 11 through the plurality of protuberances 68 thereby allowing the plurality of protuberances 68 to effectively traverse over the edge of container 11 and ultimately aligning the longitudinal axis of overcap 30b with the longitudinal axis of container 11. Further, a plurality of protuberances 68 disposed upon the inner surface of overcap 30b can also provide additional structural rigidity to overcap 30b and can increase the transfer efficiency of a force exerted by a load disposed upon overcap 30b to container 11. It would be realized by one of skill in the art that the plurality of protuberances 68 could comprise a plurality of spherical, semi-spherical, elliptical, quarter-round, and polygonal projections, indentations, and combinations thereof.

In an alternative embodiment as shown in FIG. 13, container 11f can be provided with at least one secondary protuberance 74 disposed upon body portion 14. In this way, overcap 30c can be provided with an elongate skirt portion 72 with annular sealing ring 66a disposed thereon. Thus, annular sealing ring 66a can be removeably engaged with secondary protuberance 74 to provide a better engagement of overcap 30c to container 11f. Without desiring to be bound by theory, it is believed that a container 11f provided with a protuberance 17a will exhibit a rotational movement about axis 76 due to a vacuum internal to container 11f and/or a load disposed upon protuberance 17a thereby causing protuberance 17a to move away from overcap 30c. Thus, providing secondary protuberance 74 along body portion 14 away from axis 76 can provide a point of interaction between overcap 30c and container 11f that is subject to less movement. Secondary protuberance 74 can be provided as an annular ring, a plurality of individual protuberances or a plurality of collectively elongate protuberances. Elongate skirt portion 72 can be provided as an annular protuberance or a collectively annular plurality of separable segments. Further, elongate skirt portion 72 can be provided in any length to facilitate attachment of overcap 30c to secondary protuberance 74 disposed upon body portion 14.

Coffee Packaging

A preferred method of packaging a whole, roast coffee in accordance with the present invention to provide a more freshly packed coffee product, is detailed herein.

A whole coffee bean is preferably blended and conveyed to a roaster, where hot air is utilized to roast the coffee to the

16

desired degree of flavor development. The hot roasted coffee is then air-cooled and subsequently cleaned of extraneous debris.

In a preferred, but non-limiting step, a whole roast coffee is cracked and normalized (blended) before grinding to break up large pieces of chaff. The coffee is then ground and cut to the desired particle size for the grind size being produced. The ground coffee then preferably enters a normalizer that is connected to the bottom of the grinder heads. In the normalizer, ground coffee is preferably slightly mixed, thus, improving the coffee appearance. As another non-limiting step, the coffee discharges from the normalizer and passes over a vibrating screen to remove large pieces of coffee.

The ground coffee is then preferably sent to a filler surge hopper and subsequently to a filling apparatus (filler). The filler weighs a desired amount of coffee into a bucket that in turn, dumps the pre-measured amount of coffee into a container manufactured as detailed supra. The container is then preferably topped-off with an additional amount of coffee to achieve the desired target weight.

The container is then preferably subjected to an inert gas purge to remove ambient oxygen from the container headspace. Non-limiting, but preferred, inert gases are nitrogen, carbon dioxide, and argon. Optionally, an oxygen scavenger, as described supra, and generally present in the form of a packet can be included within the container to provide removal of free or complexed oxygen. A closure, as disclosed supra, is placed on the container to effectively seal the contents from ambient air. Preferably the closure has a one-way valve disposed thereon. An overcap, disclosed supra, is then applied onto the container, effectively covering the closure and locking into the container sidewall ridge. The finished containers are then packed into trays, shrink wrapped, and unitized for shipping.

Freshness

It is believed that the resulting inventive packaging system provides a consumer with a perceptively fresher packed roast and ground coffee that provides a stronger aroma upon opening of the package and the perception of a longer-lasting aroma that is apparent with repeated and sustained openings of the packaging system. Not wishing to be bound by any theory, it is believed that roast and ground coffee elutes gases and oils that are adsorbed onto the polyolefinic compound comprising the inside of the container and closure. Upon removal of the closure, the polyolefinic compound then evolves these adsorbed gases and oils back into the headspace of the sealed container. It is also believed that the inventive packaging system can also prevent the infiltration of deleterious aromas and flavors into the packaging system. Thus, the construction of the instant packaging system can be altered to provide the benefit of most use for the product disclosed therein. To this end, it is further believed that the packaging system can be utilized for the containment of various products and yet provide the benefits discussed herein.

Applicants characterize the surprising aroma benefits provided by the present article of manufacture in terms of the article's "overall coffee aroma value", which is an absolute characterization. Applicants also characterize the aroma benefits relative to a control article (a prior art metallic can, as described below). Such a characterization is referred to herein as the article's "differential coffee aroma value". The methods for measuring overall coffee aroma value and differential coffee aroma value are described in detail in the Test Method section infra.

US 7,169,419 B2

17

The article of manufacture will have an overall coffee aroma value of at least about 5.5. Preferably, the article will have an overall coffee aroma value of least about 6, more preferably at least about 6.5, still more preferably at least about 7, and still more preferably at least about 7.5.

Preferably, the article of manufacture of the present invention will have a differential coffee aroma value of at least about 1.0, more preferably at least about 2.0, and most preferably at least about 2.8.

Test Method

A test container and an existing industry standard metallic container (control container) are packed with identical fresh roast and ground coffee product, prepared as stated above, and stored for 120 days prior to testing. Immediately prior to testing, the containers are emptied and wiped with a paper towel to remove excess roast and ground coffee product. Each container is then capped and let stand prior to testing in order to equilibrate. During testing, each container used is exchanged with another similarly prepared, but, unused container at one-hour intervals. A control container is a standard 603, tin-plated, 3-pound (1.36 Kg), vacuum-packed, steel can.

Individual panelists are screened for their ability to discriminate odors utilizing various standard sensory methodologies as part of their sensory screening. Panelists are assessed for aroma discriminatory ability using the gross olfactory acuity-screening test (universal version) as developed by Sensonics, Inc., for aroma. This test method involves a potential panelist successfully identifying aromas in a "scratch and sniff" context.

Forty successful, qualified panelists are then blindfolded and each evaluates a test container and a control container. Each blindfolded panelist smells a first container (either test container or control container) and rates the aroma on a 1 to 9 point scale (integers only) with reference to the following description: no aroma (1) to a lot of aroma (9). After a brief relief period, the blindfolded panelist evaluates the second container. The range for overall aroma is again assessed by panelists using the same rating system.

The panel results for overall coffee aroma value are then tabulated and statistically evaluated. Standard deviations based on a Student T statistical test are calculated with 95% confidence intervals to note where statistically significant differences occur between the mean values of the two products tested. Exemplary and statistically adjusted results of a "blind test" panel using existing packaging methodologies for roast and ground coffee are tabulated in Table 3, as follows:

TABLE 3

Roast and Ground Coffee Sensory Panel Results for Comparing Inventive Articles vs. Existing Articles at 120 days at 70° F. (21° C.)		
	Inventive Package (Plastic)	Standard Steel Package (Control)
No. Respondents	40	40
Amount of Coffee Aroma	7.3	4.5

Based upon this test panel, it was surprisingly found that the present articles of manufacture provide a perceived "fresher" roast and ground coffee end product for a consumer. The improvement in overall coffee aroma was increased from the control sample adjusted panel value of

18

4.5 to an adjusted panel value of 7.3 for the inventive article, resulting in a differential adjusted value of 2.8.

While particular embodiments of the present invention have been illustrated and described, it will be obvious to those skilled in the art that various changes and modifications may be made without departing from the spirit and scope of the invention. One skilled in the art will also be able to recognize that the scope of the invention also encompasses interchanging various features of the embodiments illustrated and described above. Accordingly, the appended claims are intended to cover all such modifications that are within the scope of the invention.

What is claimed is:

1. A packaging system comprising:

a blow-molded container comprising a longitudinal axis, said blow-molded container further comprising a closed bottom, an open top, and a body having an enclosed perimeter between said bottom and said top; wherein said bottom, top, and body together define an interior volume wherein said body has at least one region of deflection disposed thereon, and wherein said region of deflection allows flexion and thereby has less resistance to flexing than the body of said container proximate to said region of deflection;

an outwardly facing annular protuberance disposed upon said body, said annular protuberance being continuously disposed around said perimeter of said body proximate to said top wherein said protuberance forms a surface external to said body, said surface being substantially perpendicular to said longitudinal axis; and, a flexible closure removably attached and sealed to said annular protuberance;

wherein coffee is contained within said packaging system.

2. The packaging system of claim 1 wherein said flexible closure comprises a laminate structure, said laminate structure comprising at least one barrier layer.

3. The packaging system of claim 2 wherein said laminate further comprises a foil.

4. The packaging system of claim 1 wherein said flexible closure has a one-way valve disposed thereon.

5. The packaging system of claim 1 wherein said blow-molded container comprises a material selected from the group consisting of polycarbonate, linear low density polyethylene, low density polyethylene, high density polyethylene, polyethylene terephthalate, polypropylene, polystyrene, polyvinyl chloride, co-polymers thereof, and combinations thereof.

6. The packaging system of claim 5 wherein said material is a multi-layered structure.

7. The packaging system of claim 6 wherein said multi-layered structure further comprises at least one oxygen barrier layer.

8. The packaging system of claim 1 wherein said body has a handle disposed thereon.

9. The packaging system of claim 8 wherein said handle is integral with said body.

10. The packaging system of claim 8 wherein said handle is substantially parallel to said longitudinal axis of said container.

11. The packaging system of claim 1 further comprising an overcap.

12. The packaging system of claim 11 wherein said overcap is constructed from a material selected from the group consisting of polycarbonate, linear low density polyethylene, low density polyethylene, high density polyethyl-

US 7,169,419 B2

19

ene, polyethylene terephthalate, polypropylene, polystyrene, polyvinyl chloride, co-polymers thereof, and combinations thereof.

13. The packaging system of claim 11 wherein said overcap further comprises a first protuberance disposed upon said overcap, said protuberance being mateingly engageable with a second protuberance disposed upon said body of said container, wherein said overcap is releasably attached to said container upon the mating engagement of said first and second protuberances.

14. The packaging system of claim 11, wherein said overcap comprises a dome portion, said dome portion comprising a first surface, said first surface having at least one protuberance disposed thereon.

15. The packaging system of claim 1 wherein said coffee is roast and ground.

16. The packaging system of claim 1, wherein said closed bottom of said container is concave inwardly.

17. A packaging system comprising:

a blow-molded container comprising a longitudinal axis, said blow-molded container further comprising a closed bottom, an open top, and a body having an enclosed perimeter between said bottom and said top; wherein said bottom, top, and body together define an interior volume, wherein said body has at least one

20

region of deflection disposed thereon, and wherein said region of deflection allows flexion and thereby has less resistance to flexing than the body of said container proximate to said region of deflection;

an outwardly facing annular protuberance disposed upon said body, said annular protuberance being continuously disposed around the perimeter of said body proximate to said top wherein said protuberance forms a surface external to said body, said surface being substantially perpendicular to said longitudinal axis; and

a flexible closure removably attached and sealed to said annular protuberance;

wherein said annular protuberance translates the force of a load of at least about 16 pounds disposed upon said packaging system in a direction substantially parallel to said longitudinal axis and

wherein coffee is contained within said packaging system.

18. The packaging system of claim 17 wherein said blow-molded container is manufactured from a material having a tensile modulus ranging from at least about 35,000 pounds per square inch (2,381 atm) to at least about 650,000 pounds per square inch (4,230 atm).

* * * * *

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN**

KRAFT FOODS HOLDINGS, INC.,

Plaintiff,

v.

THE PROCTER & GAMBLE COMPANY,

Defendant.

THE PROCTER & GAMBLE COMPANY,

Counterclaim Plaintiff,

v.

KRAFT FOODS HOLDINGS, INC.,

Counterclaim Defendant

and

KRAFT FOODS GLOBAL, INC.,

Third Party Defendant.

Case No. 07-C-0613-S
Jury Trial Demanded

AMENDED COMPLAINT AND DEMAND FOR JURY TRIAL

For its Complaint against defendant The Procter & Gamble Company ("Defendant"), plaintiff Kraft Foods Holdings, Inc. ("Kraft") alleges as follows:

PARTIES

1. Kraft is a Delaware corporation with its principal place of business in Northfield, Illinois.
2. On information and belief, Defendant is a an Ohio corporation with its principal place of business in Cincinnati, Ohio.

JURISDICTION AND VENUE

3. This Court has subject matter jurisdiction over this action as it arises under the federal patent laws of the United States of America. 28 U.S.C. §§ 1331 and 1338(a). The Court has personal jurisdiction over Defendant because Defendant has systematic and continuous contacts with the State of Wisconsin and with this judicial district such that the exercise of jurisdiction over Defendant does not offend traditional notions of fair play and substantial justice.

4. Venue is proper in this judicial district because on information and belief Defendant manufactures, sells and/or distributes infringing products that are sold in this district. 28 U.S.C. § 1331, 1391(b), (c), and 1400(b).

INFRINGEMENT OF U.S. PATENT NO. 7,074,443

5. On July 11, 2006, the United States Patent & Trademark Office duly and legally issued United States Patent No. 7,074,443 (the "'443 Patent"), entitled "Vented Can Overcap." Kraft is the owner by assignment of the '443 Patent, a true and correct copy of which is attached as Exhibit A.

6. On information and belief, Defendant has infringed and continues to infringe the '443 Patent by, among other things, making, using, offering for sale, and/or selling, or inducing others to make, use, offer for sale, and/or sell containers containing Defendant's Folgers brand coffee within the United States that are within the scope of one or more claims of the '443 Patent. Defendant is therefore liable for infringement of the '443 Patent. 35 U.S.C. § 271.

7. Defendant's acts of infringement have caused and are continuing to cause monetary damage to Kraft in an amount to be determined at trial. In addition to monetary damages, Defendant's infringement has caused and will, unless enjoined, continue to cause irreparable harm to Kraft's business.

PRAYER FOR RELIEF

WHEREFORE, Kraft prays for the following relief:

1. Judgment in favor of Kraft finding that Defendant has directly and/or indirectly infringed the '443 Patent;

2. A preliminary and permanent injunction enjoining Defendant and its officers, directors, agents, servants, affiliates, employees, divisions, branches, subsidiaries, parents, and all others acting in concert or privity with any of them, from any further infringement of the '443 Patent.

3. An award of damages, attorneys' fees, costs and expenses as permitted by law;

4. An award of pre-judgment and post-judgment interest; and

5. For all other relief to which the Court may deem just and proper.

DEMAND FOR JURY TRIAL

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Kraft requests a trial by jury of any and all issues so triable by right.

Dated: December 27, 2007

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EXHIBIT A

(12) **United States Patent**
Thomas et al.

(10) **Patent No.:** **US 7,074,443 B2**
(45) **Date of Patent:** **Jul. 11, 2006**

(54) **VENTED CAN OVERCAP**

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(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 348 days.

(21) Appl. No.: **10/298,565**

(22) Filed: **Nov. 19, 2002**

(65) **Prior Publication Data**

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(51) **Int. Cl.**
B65D 51/16 (2006.01)

(52) **U.S. Cl.** **426/118**; 426/131; 426/595;
220/203.01; 220/203.29

(58) **Field of Classification Search** 426/106,
426/118, 131, 395, 594-595; 220/202, 203.01,
220/203.09, 203.29
See application file for complete search history.

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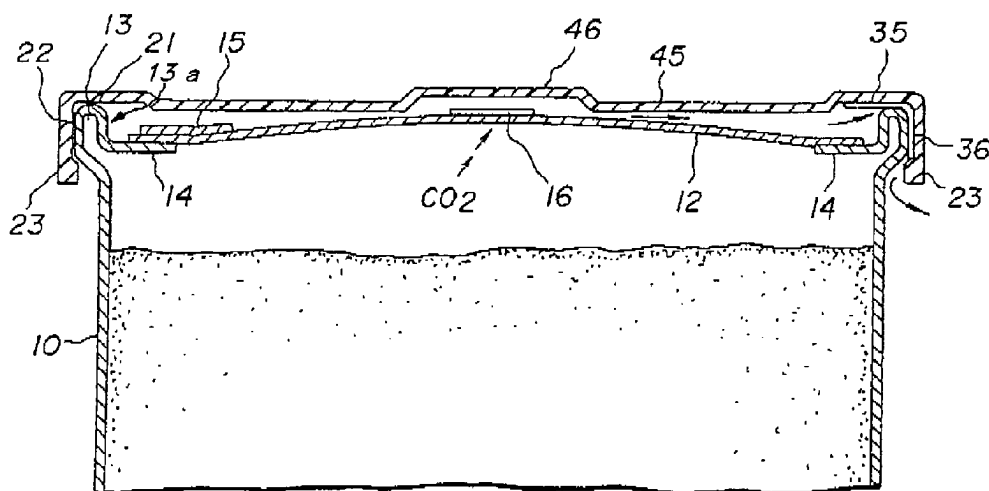
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(57) **ABSTRACT**

Packaging for a can containing ground roasted coffee packed under atmospheric pressure and having a flexible peel-off lid which is vented to allow the escape of a buildup of carbon dioxide gases. A spacing structure prevents the vent valve in the lid from being closed by contact with the plastic overcap. The spacing structure may include bosses on the overcap which engage the vent valve or a pocket in the overcap which allows the flexible lid to reach a maximum height without engaging the overcap. A permanently opened passageway may be provided between the plastic overcap and the rim of the can to further facilitate the escape of carbon dioxide.

25 Claims, 6 Drawing Sheets



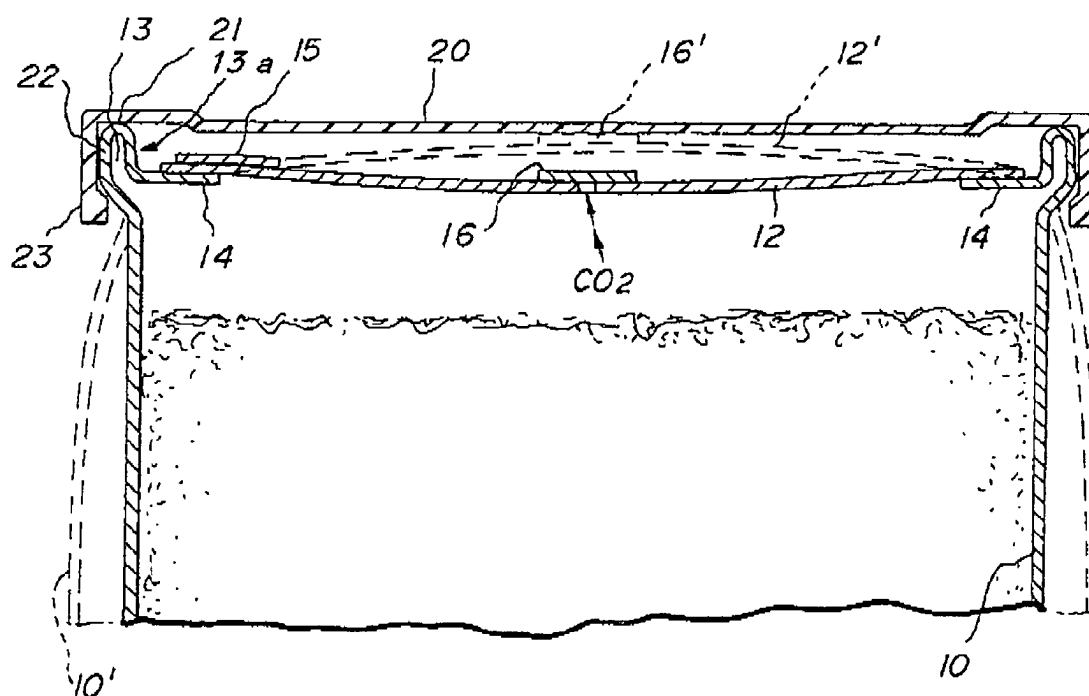


FIG. 1
PRIOR ART

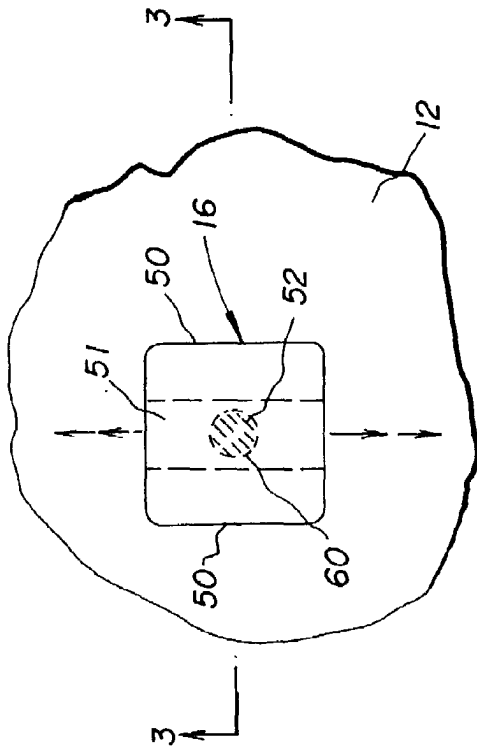


FIG. 2
PRIOR ART

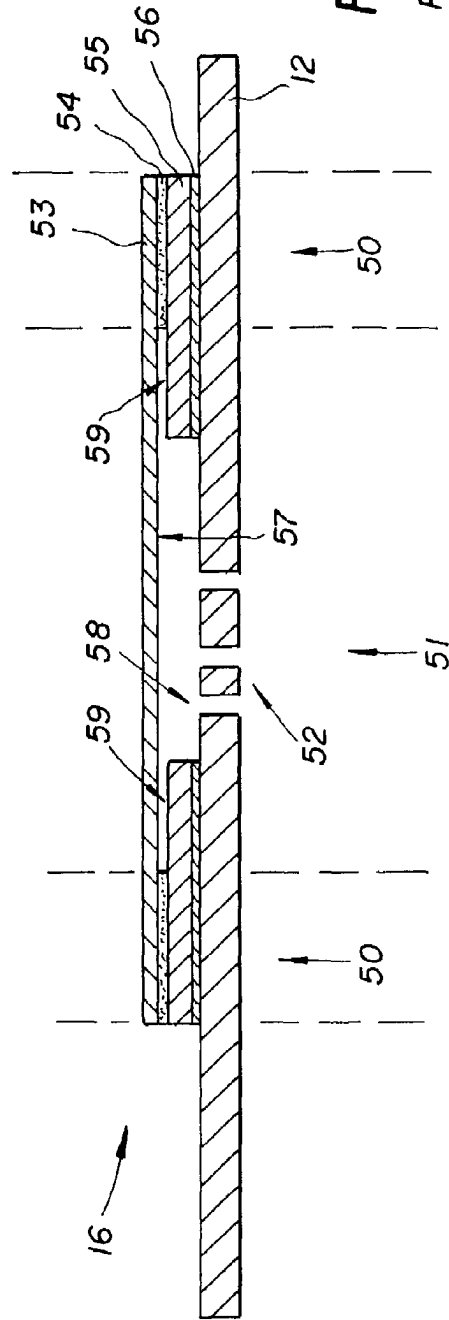


FIG. 3
PRIOR ART

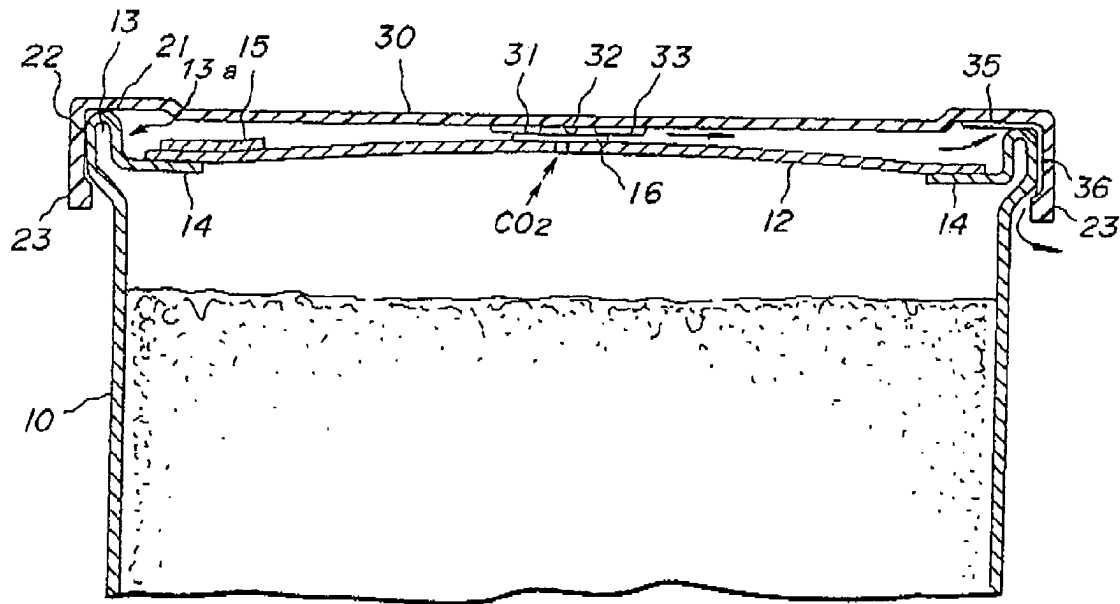


FIG. 4

U.S. Patent

Jul. 11, 2006

Sheet 4 of 6

US 7,074,443 B2

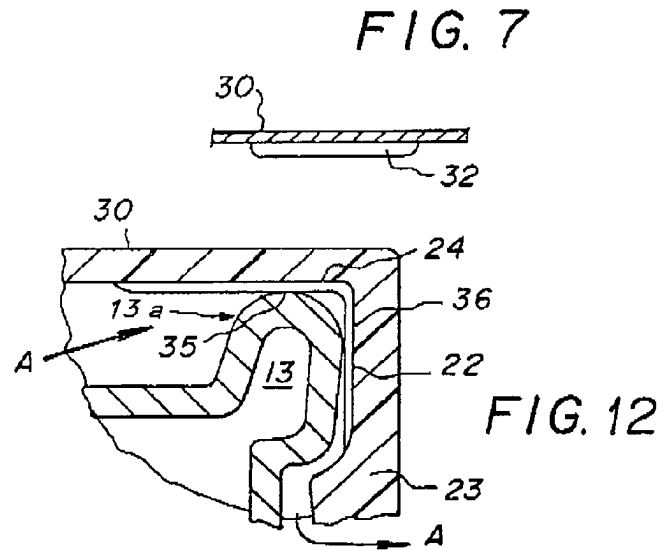
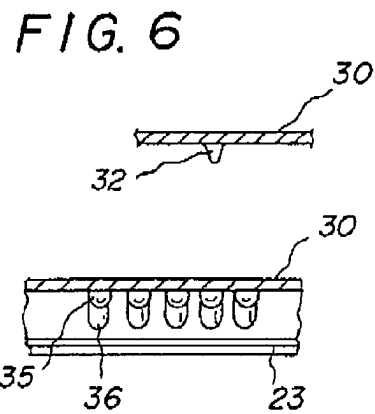
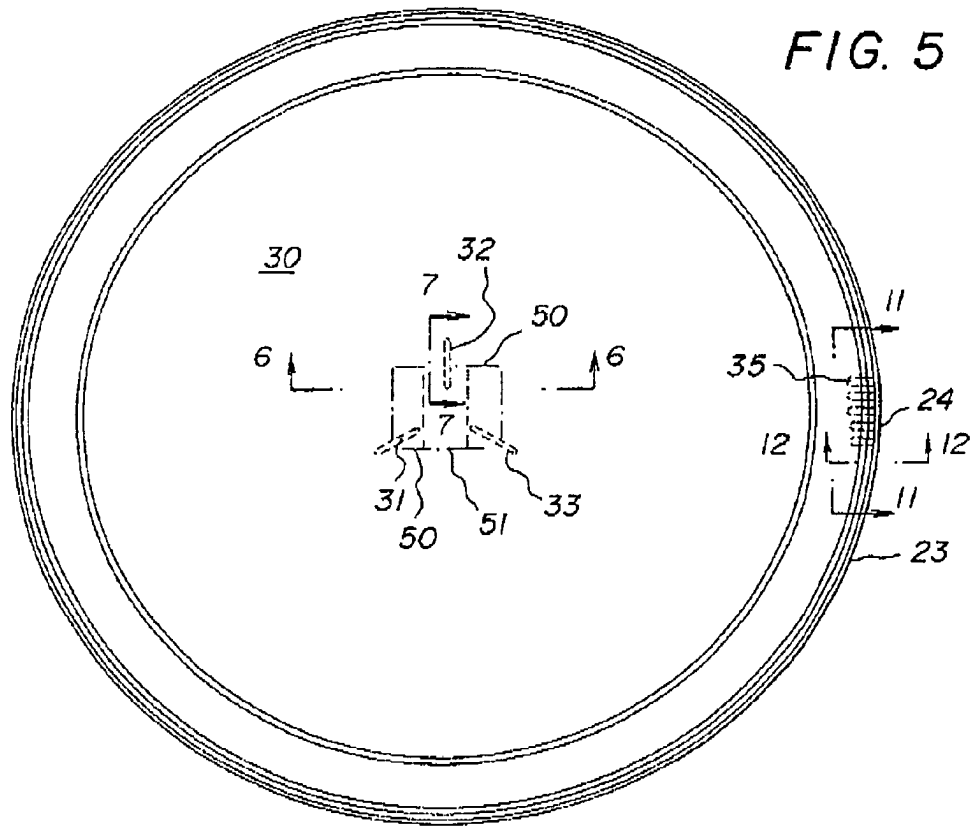


FIG. 11

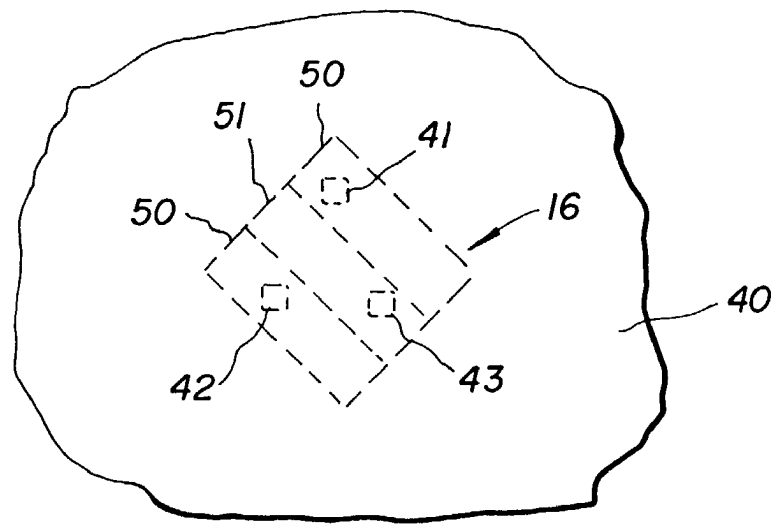


FIG. 8

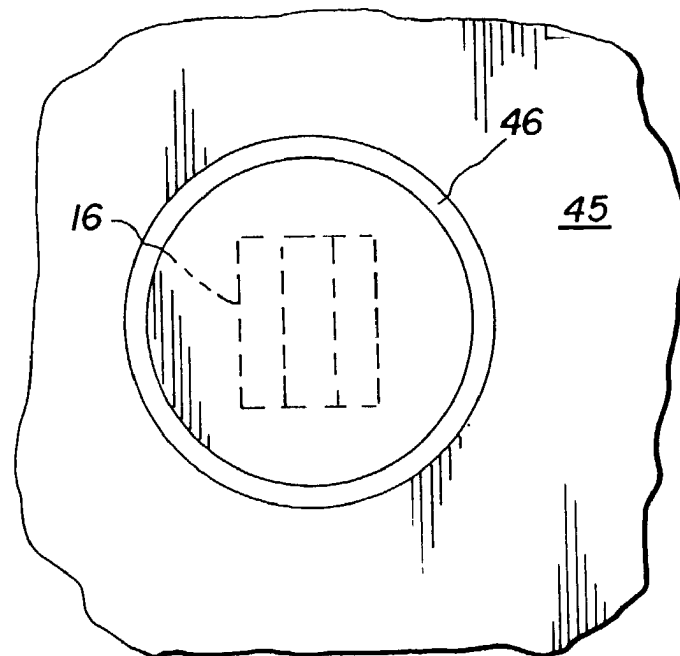


FIG. 10

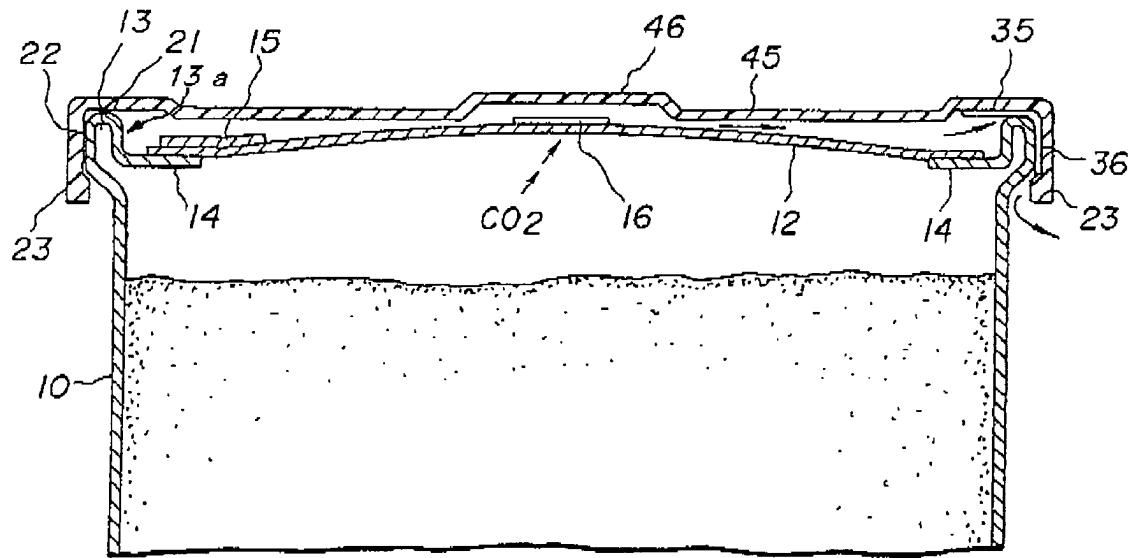


FIG. 9

US 7,074,443 B2

1

VENTED CAN OVERCAP**FIELD OF THE INVENTION**

This invention relates to a canned product which generates a gaseous pressure buildup, and to an improved arrangement for venting such gases.

BACKGROUND OF THE INVENTION

Historically, ground roast coffee packaged in a can has been vacuum packed. Recently, it has been found desirable to freshly package roast ground coffee in cans or other rigid or semi-rigid gas impervious packages under atmospheric pressure as contrasted to the prior vacuum packaged cans. Additionally, it has also been found desirable to close off the top of the can with a flexible peel-off easy opening seal or lid, whether the coffee was packed under a vacuum or atmospheric pressure. Examples of such peel-off easy opening lids are shown in the Bolton et al U.S. Pat. No. 5,688,544.

Packaged ground roast coffee gives off carbon dioxide which, in a sealed confined space will generate a pressure buildup within the container. In the case of vacuum packed ground roast coffee, this generation of carbon dioxide causes no problem because the pressure buildup simply tended to reduce the negative pressure within the sealed container. However, if the product is freshly packaged initially at atmospheric pressure without extensive degassing, then generated carbon dioxide will cause a pressure buildup in the can above atmospheric pressure. In atmospheric pressure packed ground roasted coffee cans now on the market, this pressure buildup caused by the generated carbon dioxide is dealt with by simply placing a vent valve in the top of the can. If the can is of a type having a flexible peel-off seal, the vent valve will be built directly into the flexible peel-off lid.

It is also highly desirable, if not a commercial necessity, to include with any coffee can a plastic overcap which is intended primarily to protect the coffee product within the package after the main airtight seal has been opened.

A problem has developed, however, in the case of a ground roast coffee can having a vented peel-off lid and a plastic overcap. It has been found that as the gas pressure builds up within the can it tends to dome the flexible lid upwardly and eventually against the overcap. This creates several problems. First, the constant extension of the flexible lid in its domed condition deforms the flexible lid, causing a wrinkled appearance which is unacceptable to the consumer. Additionally, the materials used to seal the vent valve to the lid, including silicon-based oils, would tend to be expelled from the valve opening and onto the surface of the overcap. This causes a visual blemish which is also unacceptable to the consumer. Additionally, if the valve is sufficiently blocked, the gas within the can can cause the can itself to bulge outwardly, which again is unacceptable to the consumer.

While a primary problem has been blockage of the vent valve in the flexible easy-off lid, an additional problem arises in that gases which do escape through the lid may not be able to escape from the space between the lid and the overcap. It is true that the overcap is simply snapped over the chime of the can in a non-airtight manner. However, the surfaces of the overcap which engage the chime of the can, generally along the top and outer periphery of the chime, while not forming a hermetic seal, clearly form a closure

2

which resists escape of any generated gases which might exit from the vent valve into the space between the lid of the can and the overcap.

Thus, a need exists for an improved arrangement for venting gases created within a can wherein the product is packed under atmospheric pressure and is of the type which generates gases sufficiently to cause a pressure buildup, especially when such a can is used in combination with an overcap.

BRIEF SUMMARY OF THE INVENTION

It is a purpose of the present invention to provide a new and improved arrangement for venting gases which build up in a package of the type wherein the product is packaged under atmospheric pressure in a can having a flexible lid with a vent valve and an overcap. More specifically, it is the purpose of the present invention to provide such an improvement for the fresh packaging of ground roast coffee in a can under atmospheric pressure. The term "can" is intended to encompass various types of containers and packages, including the usual cylindrical metallic can as well as rectangular cans, thin metallic cans of any shape and non-metallic cans.

In accordance with the present invention, an arrangement is provided for preventing the vent valve to be closed off by contact with the overcap. This arrangement comprises a spacing structure preferably formed in or on the bottom of the overcap, which prevents the vent valve in the lid from being closed by contact with the plastic overcap. In one preferred embodiment, this is achieved by providing bosses on the lower, internal surface of the overcap which will engage the flexible lid as it moves upwardly so as to limit such upward movement to such a height that the vent valve remains unblocked and the vented gases are permitted to flow therethrough. Preferably the bosses engage the vent valve in such a way as to block its upward movement while not occluding the vent valve opening. The bosses can take many different shapes such as thin ribs, rectangular cross sections and the like.

In another preferred embodiment, the spacing structure may take the form of a pocket formed in the bottom of the overcap and of such a depth that it allows the flexible lid to reach its maximum height caused by the gas buildup without the flexible lid or the vent valve engaging the overcap.

Additionally, the present invention may include a permanently open passageway at the interface between the overcap and the chime of the coffee can which will allow the escape of any built-up gases which have passed through the vent valve into the space between the flexible lid and the overcap.

In a preferred embodiment, this permanently open passageway between the overcap and the chime of the can can be provided by providing some raised bosses on the inside surface of the plastic overcap precisely where it engages the chime of the can. A series of such bosses, arranged side-by-side, would thereby provide a permanently open passageway between the bosses.

Thus, it is an object of the present invention to provide a new and improved arrangement for venting built-up gases in a can containing a product which generates gases and which can include a flexible lid and an overcap.

It is another object of the present invention to provide a new and improved arrangement for venting gases from a can of the type described which includes a structure for preventing blockage of a vent valve in the flexible lid.

It is still another object of the present invention to provide an improved venting arrangement in a package of the type described which includes a structure for forming a perma-

US 7,074,443 B2

3

nently open passageway between the interface of the overcap and the chime of the coffee can.

These and other objects of the present invention will become apparent from the detailed description of the preferred embodiments.

BRIEF DESCRIPTION OF THE DRAWINGS

Preferred embodiments of the present invention are illustrated in the accompanying drawings, wherein:

FIG. 1 is a cross sectional view through a prior art package illustrating the problem solved by the present invention;

FIG. 2 is a plan view of the vent valve on the flexible lid of FIG. 1;

FIG. 3 is a greatly enlarged cross sectional view of a vent valve of FIGS. 1 and 2, taken along line 3—3 of FIG. 2;

FIG. 4 is a cross sectional view through a package, similar to FIG. 1, but showing the features of the present invention;

FIG. 5 is a top plan view of the overcap of FIG. 4;

FIG. 6 is a partial cross sectional view taken along line 6—6 of FIG. 5;

FIG. 7 is a partial cross sectional view taken along line 7—7 of FIG. 5;

FIG. 8 is a partial plan view of an overcap similar to FIG. 5 but showing a modification of the present invention;

FIG. 9 is a cross sectional view through a package, similar to FIG. 4, but showing a modification of the present invention;

FIG. 10 is a partial plan view of the overcap of FIG. 9;

FIG. 11 is a partial cross sectional view taken along line 11—11 of FIG. 5; and

FIG. 12 is an enlarged view of the upper right-hand portion of FIG. 4, more clearly illustrating certain features of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring now to the drawings, like elements are represented by like numerals throughout the several views.

FIG. 1 illustrates a conventional can 10 which packages a product 11, for example ground roast coffee, under atmospheric pressure. The normal condition of the can is shown in solid lines. The top of the can is sealed by a flexible peel-off lid 12 formed of a flexible foil material, which lid is hermetically sealed around its periphery to a ledge 14 which is integral with the can 10. In a manner known per se, the easy peel-off lid 12 has a pull tab 15. When a product such as ground roasted coffee is packaged at atmospheric conditions, the carbon dioxide which is naturally given off by the product will cause a gaseous buildup within the interior of the can 10. It is therefore necessary to provide a vent in the form of a vent valve 16 which will permit the built-up carbon dioxide to escape to the space above the flexible lid 12.

A conventional can includes a chime 13 with inner edge 13a and a plastic overcap 20. The overcap engages the chime at contact lines 21 and 22. While these contact lines are not intended to provide a hermetic seal, they do to some extent restrict the flow of gas. The primary purpose of the overcap is to provide some protection for the product after the lid 12 has been removed. The overcap 20 also includes a lower part 23 which hangs below the chime and is not in contact with it.

The can 10 may be of any suitable material such as metal, plastic, composite materials, cardboard or other suitable

4

materials. Between the time that a can such as that shown in FIG. 1 is initially sealed, until the time that the consumer removes the lid 12, carbon dioxide is being generated within the hermetically sealed interior of the can. Initially, as the carbon dioxide tries to escape through the vent valve 16, the resistance offered by the vent valve 16 would be greater than the resistance offered to upward bending of the flexible lid 12. Eventually, the condition is reached as shown in dotted lines in FIG. 1 whereat the flexible lid 12 has been moved up to a domed position 12' and the vent valve 16 has been moved up against the bottom of the overcap 20 as shown at 16'. At this point, the downward force of the overcap would tend to close off the vent valve 16. This presents two problems. First, the lid 12 will remain in the domed position 12' and thus become deformed, causing a wrinkled appearance which is not acceptable to the consumer. Second, if the vent valve 16 includes a silicone-based oil, such oil will be expelled from the valve and onto the overcap 20. This causes a stain which tends to spread, causing a visual blemish. Additionally, in the case of rectangular cans, thin metallic cans of any shape, and non-metallic cans, a further buildup could cause the sides of the can 10 to bulge outwardly, as represented by dotted lines 10'. Such a bulged out can is also unacceptable to the consumer.

The vent valve is a commercial product made by Plitek, LLC. Referring to FIG. 2, the vent valve is divided into two outer portions 50 which are completely adhered to the top of lid 12 and a central portion 51 which includes a channel therein for the flow of the built-up gases out both ends of the channel, as shown by the arrows in FIG. 2.

The valve 16 is shown in greater detail in FIG. 3. The flexible lid 12 would preferably have openings formed therein in the form of slits 52 of a type as shown in FIG. 14 of the Bolton U.S. Pat. No. 5,688,544. The width of the slits is highly exaggerated in greatly enlarged FIG. 3. In practice, there could be approximately seven small slits, all located in the central portion of the vent valve 16. FIG. 2 illustrates a plurality of slit openings in the lid 12 within a central area designated at 60. Referring to FIG. 3, the vent valve 16 includes an upper membrane 53 of metallic polyethylene terephthalate (PET). Below the membrane 53 is a polyethylene terephthalate valve flap 57 which is adhered by synthetic rubber adhesive 54 to a natural PET base 56 which is in turn adhered to the flexible lid 12 by a pressure sensitive adhesive 56. The inner space between the valve flap 57 and the flexible lid 12 just above the slits 52 is filled with a silicone-based oil with graphite suspension. In practice, gas escaping through the flexible lid 12 will flow through an opening in the valve flap 57 and then outwardly through the ends of central portion 51 between the valve flap 57 and the membrane 53. The portions 50 and 51 are indicated by vertical dotted lines in FIG. 3.

Solutions to the problem described above are illustrated in FIGS. 4—12.

Referring to FIGS. 4—7, there is provided an overcap 30. A vent valve 16 of the type described in FIGS. 2 and 3 is superimposed in dotted lines on FIG. 5. Formed on the underside of the overcap 30 (and referring also to FIGS. 6 and 7, there are provided a plurality of thin rib bosses 31, 32 and 33. Referring to FIGS. 4 and 5, a highly domed position of the lid 12, the vent valve 16 will engage the thin rib bosses 31, 32 and 33, thus keeping the vent valve 16 spaced beneath the actual undersurface of the overcap 30. By providing three bosses 31, 32 and 33, and by placing them at 120° from each other around the center of the overcap, it is assured that at any given rotational position, while one of the thin ribs might well engage and prevent gas from flowing through

US 7,074,443 B2

5

one end of the central channel portion 51, the other end thereof will always be unobstructed for the flow of the escaping built-up gases.

The rib bosses 31-33 are all identical, and one of them is shown in detail in FIGS. 6 and 7. In a preferred embodiment, each rib boss would have a thickness of approximately 0.01 inches, a height of 0.04 inches and a width at its bottom of approximately 0.01 inches.

FIG. 8 illustrates a modification of the present invention. In this case, there is provided an overcap 40 which differs from the overcap 30 in that the thin rib bosses 31, 32 and 33 have been replaced by square cross section bosses as shown at 41, 42 and 43 in FIG. 8. These could for example have a side dimension of 0.06 inches and a depth, the same as in FIGS. 4-7, of approximately 0.04 inches. The bosses may also have other polygonal or round shapes. Referring to FIG. 8, it is noted that the three bosses 41, 42 and 43 are arranged in a triangular pattern, equiangularly about the axis of the overcap 40. Here, the vent valve 16 is turned relative to its orientation in FIGS. 4 and 5. However, owing to the arrangement of the bosses 41, 42 and 43, even though one of them, in this case 43, engages the central portion 51, the other two bosses 41 and 42 are so situated as to permit gas to flow out through the other end of central portion 51.

In the package of FIG. 4, the flexible lid 12, upon original sealing of the can, would be in the downwardly curved position as shown in solid lines in FIG. 1. However, FIG. 4 is intended to illustrate in solid lines only the position when the carbon dioxide has caused sufficient upward movement of the flexible lid 12 to the height whereat the vent valve 16 has engaged the bosses 31, 32 and 33.

FIGS. 9 and 10 illustrate another embodiment of the present invention. In this embodiment, an overcap 45 includes a pocket 46 which is sufficiently deep that the vent valve 16, even in its uppermost domed position, will never engage the bottom of pocket 46 and hence will not engage the bottom of overcap 45. The location and depth of pocket 46 must be selected so that in the uppermost position of the lid 12 and valve 16, there is an open passageway through the vent valve 16, below the edges of the pocket 46 and out toward the periphery of the can. The pocket would preferably have a height of between $\frac{1}{8}$ and $\frac{1}{4}$ inch.

As noted above, the contact lines 21 and 22 between the chime of the can and the interior of the overcap 30, 40, 45, while not forming a hermetic seal, do offer some resistance to the flow of gases. Referring to FIGS. 11 and 12, with the vent valve 16 unblocked (by the use of bosses 31-33 or 41-43, or pocket 46), permitting free flow of the carbon dioxide out of the can and into the space between the flexible lid 12 and the overcap 30, 40, 45, it is possible that the gases can build up to a pressure sufficient to pass beyond contact lines 21 and 22. However, in order to facilitate the flow of gases out of the space between the overcap 30, 40, 45 and the lid 12, the present invention further includes providing a permanently opened passageway from this inner space to the surrounding exterior. For this purpose, raised elongated bosses 35 and 36 are provided on the top and side of the interior of the overcap 30, 40, 45 where the overcap engages the chime 13 at contact lines 21 and 22. Gases entering this inner space between lid 12 and overcap 30, 40, 45 now have a permanently opened passageway for flowing out of this space. This flow from the vent valve 16 up and around the chime 13 is shown by arrows at the upper right hand portion of FIG. 2 and by arrows A in FIG. 7.

Although the invention has been described in considerable detail, it will be apparent that the invention is capable

6

of numerous modifications and variations, apparent to those skilled in the art, without departing from the spirit and scope of the invention.

What is claimed is:

1. A can containing a food product which creates a gas buildup, the top of the can comprising a flexible lid having a vent valve to vent built-up gases, an overcap covering the lid and engaging the sides of the can around the periphery thereof, the overcap including a spacing structure inward from an inner edge of the periphery which prevents the vent valve from being blocked by the overcap when the lid is pushed toward the overcap by gases built-up within the can.

2. A can according to claim 1, said spacing structure comprising a plurality of bosses on the overcap positioned to be engaged by the flexible lid to block further upward movement thereof, and to allow gases passing through the vent valve to flow toward the periphery of the can.

3. A can according to claim 2, wherein the bosses are positioned to engage the vent valve without occluding gas flow therethrough.

4. A can according to claim 3, wherein there are three bosses which are arranged equiangularly about the center of the overcap.

5. A can according to claim 4, wherein the bosses, viewed in plan view, are thin ribs extending along radii of the overcap.

6. A can according to claim 4, wherein the bosses are, in plan view, rectangular.

7. A can according to claim 1, wherein the spacing structure comprises a pocket formed in the bottom of the overcap which is of sufficient depth to allow the flexible lid to reach a maximum height of the lid caused by the gas buildup without the flexible lid or the vent valve engaging the overcap.

8. A can according to claim 1, wherein the product is ground roast coffee.

9. A can according to claim 1, including a permanently opened passageway from the space between the lid and overcap around the top rim of the can to the exterior.

10. A can according to claim 9, said passageway being formed between raised bosses formed in the overcap where the overcap engages the top rim of the can.

11. A can according to claim 1, wherein the lid does not contact the overcap to block the valve from opening when gases build up within the can.

12. The can of claim 1, wherein the flexible lid is a peelable lid.

13. The can of claim 1, wherein the flexible lid comprises flexible foil.

14. A can containing a food product which creates a gas buildup, the top of the can comprising a flexible lid having a vent valve to vent built-up gases and a chime around the periphery of the top, an overcap covering the lid, and a lower portion extending down along the sides of the can and engaging the sides of the can around the periphery thereof, and including a permanently opened passageway from the space between the lid and the overcap to the exterior, said passageway extending over the chime and down inside the lower portion of the overcap to empty out along the side of the can, said passageway being formed between raised bosses formed in the overcap which engage the top rim of the can.

15. A can containing roast ground coffee packed at atmospheric pressure and generating a carbon dioxide gas buildup,

US 7,074,443 B2

7

a flexible lid hermetically sealing the top of the can and including a vent valve allowing the escape of built-up carbon dioxide, and

an overcap covering the top of the can and engaging the can around the upper rim thereof, the overcap including a spacing structure inward from an inner edge of the rim which prevents the vent valve from being blocked by the overcap when the lid is pushed up toward the overcap by the pressure of the built-up carbon dioxide.

16. A can according to claim 15, said spacing structure comprising a plurality of bosses on the overcap positioned to be engaged by the flexible lid to block further upward movement thereof, and to allow gases passing through the vent valve to flow toward the periphery of the can.

17. A can according to claim 16, wherein the bosses are positioned to engage the vent valve without occluding the flow of carbon dioxide therethrough.

18. A can according to claim 17, wherein there are three bosses which are arranged equiangularly about the center of the overcap.

19. A can according to claim 18, wherein the bosses, viewed in plan view, are thin ribs extending along the radii of the overcap.

20. A can according to claim 18, wherein the bosses are, in plan view, rectangular.

21. A can according to claim 15, wherein the spacing structure comprises a pocket formed in the bottom of the

8

overcap which is of sufficient depth to allow the flexible lid to reach a maximum height of the lid as caused by the carbon dioxide buildup without the flexible lid or the vent valve engaging the overcap.

22. A can according to claim 15, including a permanently opened passageway from the space between the lid and overcap around the top rim of the can to the exterior.

23. A can containing a food product which creates a gas buildup, the top of the can comprising a flexible lid having a vent valve to vent built-up gases, an overcap covering the lid and engaging the sides of the can around the periphery thereof, the overcap including a spacing structure which prevents the vent valve from being blocked by the overcap when the lid is pushed toward the overcap by gases built-up within the can, said spacing structure being positioned such that said spacing structure is not engaged by the valve when the lid is pushed toward the overcap by the gases built-up within the can.

24. A can according to claim 23, wherein the spacing structure is circular.

25. A can according to claim 23, wherein the product is ground roast coffee.

* * * * *

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN**

KRAFT FOODS HOLDINGS, INC.,

Plaintiff,

v.

THE PROCTER & GAMBLE COMPANY,

Defendant

Case No. 07-C-0613-S

THE PROCTER & GAMBLE COMPANY,

Counterclaim Plaintiff

v.

KRAFT FOODS HOLDINGS, INC.

Counterclaim Defendant

and

KRAFT FOODS GLOBAL, INC.

Third-Party Defendant

**ANSWER TO KRAFT FOODS HOLDINGS, INC.'S AMENDED COMPLAINT;
COUNTERCLAIMS AND THIRD-PARTY COMPLAINT OF THE PROCTER &
GAMBLE COMPANY; DEMAND FOR JURY TRIAL**

Defendant and Counterclaim Plaintiff, The Procter & Gamble Company ("P&G"), answers the First Amended Complaint of Plaintiff Kraft Foods Holdings, Inc. ("KFH") and asserts its Counterclaim and Third-Party Claim against KFH and Third-Party Defendant Kraft Foods Global, Inc. ("KFG") (collectively, "Kraft"), as follows:

THE PARTIES

1. P&G admits that Kraft is a Delaware Corporation and that it has a principal place of business in Northfield, Illinois.

2. Admitted.

JURISDICTION AND VENUE

3. P&G admits that Kraft purports to allege a cause of action under the patent laws of the United States. P&G admits that Kraft purports to invoke subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a). P&G admits that it is subject to personal jurisdiction in this Court with respect to the claims asserted in the Complaint. P&G denies the remaining allegations of paragraph 3, including that it has committed any acts of infringement.

4. P&G also admits that venue exists in this judicial district under 28 U.S.C. 1331, 1391(b), (c), and 1400(b). P&G denies the remaining allegations in paragraph 4 of the Complaint.

ALLEGED INFRINGEMENT OF U.S. PATENT NO. 7,074,443

5. P&G admits that U.S. Patent No. 7,074,443 (the “’443 Patent”), entitled “Vented Can Overcap,” issued on July 11, 2006. P&G further admits that the face of the ’443 Patent lists KFH as the “Assignee.” P&G is without knowledge or information sufficient to form a belief as to the truth of KFH’s allegation that it owns the patent. P&G denies the remaining allegations of paragraph 5 of the Complaint.

6. P&G denies the allegations of paragraph 6 of the Complaint.

7. P&G denies the allegations of paragraph 7 of the Complaint.

RESPONSE TO PRAYER FOR RELIEF

P&G denies that Kraft is entitled to any of the relief it has requested.

FIRST AFFIRMATIVE DEFENSE

(Invalidity)

Each claim of the ’443 Patent is invalid and/or unenforceable for failure to comply with the requirements of patentability stated in Title 35, United States Code, and particularly the

requirements of one or more of 35 U.S.C. §§ 101, 102, 103, and 112.

SECOND AFFIRMATIVE DEFENSE

(Non-Infringement of the '443 Patent)

P&G has not infringed, and currently does not infringe any valid claim of the '443 Patent directly, indirectly, contributorily, by inducement, under the doctrine of equivalents, or in any other manner.

THIRD AFFIRMATIVE DEFENSE

(Prosecution history estoppel)

Kraft is estopped by the doctrine of prosecution history estoppel from asserting infringement under the doctrine of equivalents for one or more of asserted claims.

FOURTH AFFIRMATIVE DEFENSE

(Marking)

Kraft and/or its licensees has failed to mark articles patented under the '443 Patent in a manner sufficient to give notice under 35 U.S.C. Section 287 thereby barring any recovery of damages for the period before Kraft commenced this action.

PRAYER FOR RELIEF ON KFH'S COMPLAINT

WHEREFORE, P&G prays that Kraft take nothing by its Complaint, and that P&G be awarded judgment in this action, costs of suit incurred herein, and such other relief as the Court deems just and proper.

COUNTERCLAIMS

For its counterclaims and third-party claim against KFH and KFG, P&G alleges as follows:

THE PARTIES

1. P&G is an Ohio corporation with its principal place of business in Cincinnati, Ohio.
2. KFH is a Delaware corporation with a principal place of business in Northfield, Illinois.

3. KFG is a Delaware corporation with a principal place of business in Northfield, Illinois.

4. On information and belief, KFG is a wholly-owned subsidiary of Kraft Foods Inc., a Virginia Corporation, which is engaged, through its subsidiaries, in the manufacture and sale of packaged foods and beverages in the United States, including Maxwell House brand ground, roast coffee in 39-ounce plastic containers. On information and belief, KFH is a wholly-owned subsidiary of KFG.

5. KFH is the assignee of record of the '443 Patent, issued to Jeffrey A. Thomas, Jeffrey Alan Zimmermann, Prias DeCleur, and Mete Bruncaj ("Assignors"). On information and belief, the Assignors, working either directly or indirectly for KFH in collaboration with members of the Global Technology & Quality Group of Kraft Foods Inc., designed and made plastic containers for ground, roast coffee beginning in about 2002 and assigned the rights to those designs to KFH. On information and belief, KFH licensed KFG to manufacture, distribute, offer for sale and sell Maxwell House brand coffee sold in 39-ounce containers using technology developed for KFH by the Assignors. On information and belief, KFG manufactures, markets, and sells Maxwell House brand coffee in 39-ounce plastic containers designed, developed, and made by the Assignors and licensed to KFG by KFH.

JURISDICTION AND VENUE

6. Paragraphs 1 through 5 are incorporated herein by reference.

7. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a) because this action arises under the patent laws of the United States, including 35 U.S.C. § 271 *et seq.* The Court additionally has jurisdiction over P&G's counterclaims because they arise under the Declaratory Judgment Act, 28 U.S.C. §§ 2201, 2202 and 28 U.S.C. § 1338(a). There is a justiciable controversy concerning the validity, enforceability, and infringement of the '443 Patent, which Kraft alleges is being infringed and causing irreparable harm to their business.

8. The Court has personal jurisdiction over KFH and KFG based on their filing of this lawsuit. The Court also has personal jurisdiction over KFH and KFG because they have systematic and continuous contacts with the State of Wisconsin and with this judicial district such that the exercise of jurisdiction over them does not offend traditional notions of fair play and substantial justice. On information and belief, KFH licenses KFG to sell and/or distribute infringing products in this district and KFG sells and/or distributes infringing products in this district.

9. Venue with respect to KFH and KFG is proper in this district pursuant to 28 U.S.C. §§ 1331, 1391(b), (c) and 1400(b).

COUNT I

(Declaratory Relief of Invalidity of '443 Patent Against Kraft Foods Holding, Inc. and Kraft Foods Global, Inc.)

10. Paragraphs 1 through 9 are incorporated herein by reference.

11. An actual controversy exists between P&G and KFH and KFG as a result of KFH and KFG's assertion in the Amended Complaint that they own the '443 Patent, that P&G allegedly infringes this patent, and that the alleged infringement is causing irreparable harm to their business.

12. On information and belief, the asserted claims of the '443 Patent are invalid for failure to comply with the requirements of patentability stated in Title 35, United States Code, and particularly one or more of the requirements of 35 U.S.C. §§ 101, 102, 103, and 112.

13. The claims of the '443 Patent are based on an application filing date identified by the patent as November 19, 2002. On information and belief, one or more of the claimed inventions of the '443 Patent are invalid under 35 U.S.C. § 102(g) based on prior invention by P&G's inventors, including P&G inventors who were awarded United States Patent 7,169,419 ("the '419 Patent"), entitled "Packaging System To Provide Fresh Packed Coffee." A true and correct copy of the '419 Patent is attached hereto as Exhibit A. On information and belief, P&G's inventors made one or more of the inventions claimed in the '443 Patent in this country

and did not abandon, suppress, or conceal the inventions. Based on the assertion of infringement by KFH and KFG, the '419 Patent discloses one or more of the inventions claimed in the '443 Patent.

COUNT II

(Declaratory Relief of Non-Infringement Against Kraft Foods Holding, Inc. and Kraft Foods Global, Inc.)

14. Paragraphs 1 through 13 are incorporated herein by reference.

15. KFH and KFG assert in their Amended Complaint that P&G infringes the '443 Patent. P&G does not infringe and has not infringed any valid claims of the '443 Patent.

COUNT III

(Infringement of U.S. Patent No. 7,169,419 By Kraft Foods Holding, Inc. and Kraft Foods Global, Inc.)

16. Paragraphs 1 through 15 are incorporated herein by reference.

17. On January 30, 2007, the United States Patent & Trademark Office ("USPTO") duly and legally issued the '419 Patent to inventors David Dalton, Kerry Weaver and Thomas Manske, Jr. These inventors have assigned all rights and interest in the '419 Patent to P&G. KFG has infringed and continues to infringe the '419 Patent. The infringing acts include at least manufacturing, using, selling, and/or offering to sell 39-ounce plastic containers of Maxwell House brand coffee. KFG is liable for infringement of the '419 Patent pursuant to 35 U.S.C. § 271.

18. KFG's acts of infringement have caused and are causing damage to P&G. P&G is entitled to recover from KFG the damages sustained by P&G as a result of KFG's infringement in an amount to be proven at trial. KFG's infringement of P&G's rights under the '419 Patent also is causing, and will continue to cause, irreparable harm to P&G, for which there is no adequate remedy at law, unless KFG is enjoined by this Court.

19. Upon information and belief, KFG's infringement of the '419 Patent is willful and deliberate, entitling P&G to increased damages under 35 U.S.C. § 284 and attorney fees incurred in prosecuting this action under 35 U.S.C. § 285.

20. On information and belief, KFG is the alter ego of KFH and they are jointly and severally liable for directly infringing the '419 Patent. On information and belief, KFH is a wholly-owned subsidiary of KFG and has substantially the same management and ownership, is commonly controlled by that management and ownership, and shares substantially the same business purpose with respect to the procurement of infringing technology for storing ground, roast coffee in plastic containers, the defense of litigation relating to this infringement, and the assertion of patent infringement claims relating to this technology. On information and belief, KFH and KFG do not maintain corporate formalities with respect to their development and procurement of technology and intellectual property and the conduct of litigation regarding to intellectual property relating to plastic containers used for storing ground, roast coffee. KFH filed this lawsuit as "KRAFT FOODS GLOBAL, INC.," as indicated on page 3 of its original Complaint, filed October 26, 2007. KFH also considers itself synonymous with "Plaintiff Kraft Foods Global, Inc.," as it stated in its original Corporate Disclosure Statement, filed October 26, 2007. In identifying the parent corporation of the plaintiff, Kraft Foods Global, the Corporate Disclosure Statement stated that "Kraft Foods Global, Inc. is a wholly owned subsidiary of Kraft Foods, Inc., a publicly traded company." Any attempt by KFG and KFH to rely on the fiction of being separate corporate entities would be inequitable in that it could allow KFH to accuse P&G as an alleged infringer in a litigation in which it may avoid having to answer for its own infringement of P&G's related '419 Patent on preexisting technology.

21. On information and belief, KFH, during the process of developing technology described in its patents relating to the storing of ground, roast coffee in plastic containers, including the '443 Patent, has infringed the '419 Patent by making or using one or more of the claimed inventions of the '419 Patent.

22. On information and belief, KFH, with knowledge of the '419 Patent, actively induced and encouraged KFG's infringement of the '419 patent by licensing KFG to use technology that infringes the '419 Patent by making, selling, and offering to sell ground, roast coffee in plastic containers that infringe the '419 Patent, and by making designs and information for practicing that technology available to KFG.

23. On information and belief, KFH's infringement of the '419 Patent is willful and deliberate, entitling P&G to increased damages under 35 U.S.C. § 284 and attorney fees incurred in prosecuting this action under 35 U.S.C. § 285.

PRAYER FOR RELIEF AS TO COUNTS I -III

WHEREFORE, P&G prays for judgment and seeks relief against KFH and KFG as follows:

(a) That the Court determine and declare that one or more of the claims of the '443 Patent is invalid;

(c) That the Court determine and declare that the claims of the '443 Patent are not infringed by P&G;

(b) For preliminary and permanent injunctions enjoining the aforesaid acts of infringement by KFH and KFG, and their officers, agents, servants, employees, subsidiaries and attorneys, and those persons acting in concert with KFH and KFG, including related individuals and entities, customers, representatives, dealers, and distributors;

(c) For an award of actual damages against KFH and KFG;

(d) For an award of pre-judgment and post-judgment interest, according to proof against KFH and KFG,

(e) For an award of enhanced damages pursuant to 35 U.S.C. § 284 against KFH and KFG;

(f) For an award of attorney fees pursuant to 35 U.S.C. § 285 or as otherwise permitted by law against KFH and KFG;

(g) For all costs of suit against KFH and KFG; and

(h) For such other and further relief as the Court may deem just and proper.

Dated this 9th day of January, 2008

Respectfully submitted,

By: s/ Paul F. Linn

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JURY DEMAND

P&G demands a jury trial on all issues that are triable by right to a jury.

Dated this 9th day of January, 2008

Respectfully submitted,

By: s/ Paul F. Linn

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